

The Role of Deixis in the Development of
Finno-Ugric Grammatical Morphemes*

Leena Tuulikki Hazelkorn

1. Introduction.

Finno-Ugrists have traditionally maintained that the reconstructed Proto-Finno-Ugric or Proto-Uralic mother language had a series of person markers which occur in three different functions in all of the daughter languages: as personal pronouns, subject agreement markers in verbs, and as possessive suffixes (corresponding to English possessive pronouns). With the exception of a few reflexes in the present day languages, their common origin is transparent even to a non-Finno-Ugrist. Scholars have disagreed, however, about which grammatical category these person markers represented in the proto-language. Some maintain that they were personal pronouns which later become suffixes under certain conditions. Others assume that these elements were originally possessive suffixes, and that the independent personal pronouns represent a later development.

The aim of this paper is to present a critical summary of the reconstruction of person markers in the Finno-Ugric languages, as proposed in the available literature,² and to investigate the relationship of the morphemes used to mark persons to morphemes marking other grammatical categories in the daughter languages. This latter aspect has not been discussed in the literature, except in a few contradictory statements. Some scholars have pointed out the similarity between certain grammatical morphemes and the person markers, but to my knowledge an historical account of the similarities has not been offered.

The reconstruction of markers for certain grammatical categories in Proto-Finno-Ugric has been controversial because the scholars have not been able to agree on the form of these morphemes in the proto-language. The disagreements concern the Proto-Finno-Ugric accusative case marking (*-m), and the reconstruction of the plural morpheme (*-t) for the proto-language.

It is the purpose of this paper to demonstrate that the reconstructed person markers did not function in Proto-Finno-Ugric as markers of one of the inherited grammatical categories, but that they had a wider range of application. They were actually general deictic

particles which referred to the roles and locations of the participants in the speech situation. Their development as markers for a variety of grammatical categories may have been initiated in the proto-language, but it continued to evolve in the separate development of each daughter language. In the various languages, different deictic particles were generalized for particular functions. An analysis of these reconstructed person morphemes as deictic particles in the proto-language will also shed light on the controversy surrounding the reconstruction of the grammatical morpheme *-m for the accusative, and *-t for the plural as well.

If we interpret the aforementioned elements as general deictic particles we are able to account for the development of person markers per se, demonstrative pronouns, accusative markers, *-t plurals, and some other grammatical morphemes in a more satisfactory way.

The discussion which follows will offer an explanation of how the original deictic elements developed into markers of various grammatical categories. The major semantic feature shared by all of these grammatical categories is definiteness. Historically, the₃ deictic particles could be used either in the focusing function, when the speaker wished to focus or emphasize a constituent, or in the topicalizing function, to mark the given (old) information in the utterance. It is proposed here that in the history of the Finno-Ugric languages, the use of deictic particles in the focusing function is chronologically prior to the topicalizing function.

The historical development of the Finno-Ugric "person markers" indicates the importance of discourse notions, such as focus and topic, in the historical modification of the grammar of a language. Therefore, a morphological reconstruction has to consider a wider grammatical framework when establishing the semantic value of the reconstructed entities. We are dealing with a grammatical development which took place in the distant past, and with elements that are considered to be part of the oldest recoverable stage of the language. Conclusive evidence is therefore difficult to find. Some of the developments that are discussed in the context of Finno-Ugric languages may have counterparts in other language families, but the historical association of deictic elements with certain types of grammatical morphemes seems to be especially transparent in this particular language family.

2. Person Markers in the Finno-Ugric Languages.

2.1. General descriptions in the literature.

Proto-Finno-Ugric is traditionally assumed to have had one series of person markers that gave rise to three different sets of morphemes in the modern daughter languages--personal pronouns, possessive suffixes, and subject agreement markers in verbs.

The scholars who have reconstructed the person markers for the Proto-Finno-Ugric language have not agreed, however, about which grammatical category these morphemes represented in the proto-language. Finno-Ugrists have often claimed that the Proto-Finno-Ugric language had not developed a differentiation between nouns and verbs, but only had undifferentiated roots that could function as nouns or verbs (e.g., Hajdú 1975:78). There are, however, other scholars who argue that the finite verb-forms of the Uralic languages were originally nominal constructions, verbal nouns with suffixed person markers (Collinder 1960:243; Itkonen 1962:208).

The supporters of the first theory generally assume that the proto-language had one person marker category--personal pronouns. Personal pronouns were used in connection with nouns to mark possession, and in connection with verbs to mark the performer of the action, the agent. Hajdú, for example, claims that the proto-language could have alternate orders: Verb - Personal Pronoun, or Personal Pronoun - Verb. The latter word order was used when the pronoun had emphasis. In a later stage, the unemphasized personal pronouns lost their independent status, and became suffixes; possessive suffixes attached to nouns, and subject agreement markers attached to verbs (Hajdú 1975:85-87).

Serebrennikov (1973:72) explains the similarity of the person marker systems by their common derivation from demonstrative pronouns; according to him, both personal pronouns and possessive suffixes developed from demonstrative pronouns in Proto-Uralic.

Those scholars who interpret the verb forms in the proto-language as verbal nouns reconstruct the person marker category as possessive suffixes. Some Finno-Ugrists, for example E. Itkonen have presumed the reverse because the person markers in the verbal system are almost identical to the possessive suffixes, the proto-language must have a system of verbal nouns as finite forms of the verb (Itkonen 1962:208). It is suggested that personal pronouns developed under those conditions where the person marker was emphasized.

The actual processes through which the differentiation to three person marker categories took place have not, however, been explicated. There are references to the primitive thinking of the 'Urmensch' (e.g., Serebrennikov 1973:66) with the underlying implication that the present system with three person marker categories represents a step towards sophistication among the Finno-Ugric peoples.

If one wants to explicate the development and function of the person markers and their proto-forms, the starting point should be a context wider than only the three person marker categories in the modern languages. In order to explain the three similar reflexes in the modern languages, it is not, however, imperative to derive two of the categories from the third one. If we hypothesize that the proto-forms of the person markers were actually general deictic particles in Proto-Uralic--the position I will take in this paper--and not

specified as markers for the specific grammatical categories in the modern languages, we are able to understand the development of these elements as markers in a variety of grammatical categories in the daughter languages besides those associated with person. The deictic particles referred to roles in the communication act: first, anything connected with the speaker or in the proximity of the speaker ('speaker deixis'); second, anything connected with the addressee or his location ('addressee deixis'); and third, anything that is not connected with the speaker's or the addressee's location ('audience deixis') (I am using Fillmore's terms; Fillmore 1975).

The following section discusses the traditional reconstruction of the proto-forms associated with person markers on the basis of the modern reflexes. The reconstruction considers reflexes from nine daughter languages (see Tables 1-3). The Lappish dialects and Samoyed languages have been excluded even if they would give very useful information for the reconstruction. The dialect differences in these languages are very great, and the available material does not provide a coherent description of the deictic/person elements in any dialect. The information given would therefore be quite unreliable, being gathered from different dialects without any systematic analysis. The study of the person markers in the Samoyed languages might contribute significantly to the explanation of the original deictic elements, because these languages make a greater number of distinctions than the traditional three deictic categories. Therefore references are made throughout the paper to Samoyed forms even though they are not systematically discussed. Finnish and Estonian are used as representatives of the Balto-Finnic group. Finnish is considered a conservative language, "Finno-Ugric Sanskrit" (Anttila 1973:318) while Estonian is an innovative one. The other Balto-Finnic daughter languages fall between these two in respect to relative archaism.

A lengthy discussion on the reconstruction of the "person markers" is included in this paper because this information is not readily available in the handbooks. Authors have often noted that one proto-form can be reconstructed for all three reflexes, but detailed discussions of how the modern reflexes have developed from the proto-forms have not been presented. Some of the changes seem to represent universal or near-universal developments; others are based on language-specific developments. All of the details have not been discussed; the emphasis has been on those points where considerable controversy exists. Some suggestions have been given concerning the directions which further studies should take.

2.2. Functions of the person markers in modern languages.

To clarify the basic functions of the person markers in the modern languages, an example is given from Modern Finnish:

	<u>mennä/mene-</u> 'to go'	<u>koti</u> 'home'	<u>personal pronouns</u>
Sg. 1	<u>mene-n</u> 'I go'	<u>koti-ni</u> 'my home'	<u>mi-nä</u> 'I'
2	<u>mene-t</u> etc.	<u>koti-si</u> etc.	<u>si-nä</u> etc.
3	<u>mene-e</u> (vowel length)	<u>koti-nsa</u>	<u>hän/se</u>
Pl. 1	<u>mene-mme</u>	<u>koti-mme</u>	<u>me</u>
2	<u>mene-tte</u>	<u>koti-nne</u>	<u>te</u>
3	<u>mene-vät</u>	<u>koti-nsa</u>	<u>he/ne</u>

In modern Finnish, the subject pronouns of the first and second persons, singular or plural, do not have to be overtly expressed; the person is marked in the verb. In the third person, however, the pronoun must be expressed. For example:

Löysi-n kirja-ni 'I found my book'
Löysi-t-kö kirja-ni? 'Did you find my book?'
*Löysi kirja-nsa 'He found his book'

This is the situation in Standard Finnish, but in dialects (or in colloquial speech in general) where the agreement markers have disappeared from the verbs, the subject is marked overtly by the pronoun in all persons.

Vértés (1967) reports from Ob-Ugric languages that the use of the personal pronoun is sometimes stylistically conditioned. There seems to be, however, a general tendency that in coordinate structures, the first sentence has a personal pronoun, but the second does not (in her examples [pp. 16-17], both sentences have the subject in the same person). If the sentence structure is Subordinate Clause-Main Clause, the subordinate clause does not have a pronoun, but the main clause does. The subordinate clause maintains the older state; the main clause innovates.

The possessive suffixes, whose main function is the same as possessive pronouns in English, have developed various other functions in some daughter languages. In Permian languages (i.e., Zyrian and Votyak), Cheremis, Ob-Ugric (i.e., Vogul and Ostyak), as well as in Samoyed languages, the second and third person singular possessive suffixes can be used as definite articles (in Cheremis and in Permian languages, even the first person suffix can be used for the same function) (Collinder 1960:204). In a later section of the paper, I will discuss the significance of this usage for the proposed analysis.

In Finnish, genuine possession is actually indicated in the third person only in cases where the genitive of the personal pronoun is used, for example, Se on hänen hattunsa 'It is his hat'. One can say Hän otti hattunsa 'He took his hat', but not *Se on hattunsa 'It is his hat'. In the sentence Hän otti hattunsa 'He took his hat', the third person singular possessive suffix -nsa acts much like a definite article used reflexively. In Lappish, the possessive suffixes are chiefly reflexive possessive pronouns:

gawdni-m gâpperâ-m 'I found my cap', but gawdni-m dú gâpperâ
 found-I cap-my found-I your cap
 'I found your cap' (Collinder 1960:203).⁴

The possessive suffixes do not generally occur with subjects in Lappish, mú akso lâ lappum 'my axe is lost' (instead of akso-m).

In the Balto-Finnic group, there is a general tendency to lose the possessive suffixes; Estonian and Vote have lost them completely, and other languages have limited their use. Finnish represents the archaic state, but as the colloquial language indicates, the possessive suffixes are gradually disappearing. Interestingly, those forms where the possessive suffixes have survived the longest, for example in Estonian, are vocative forms (Mark 1925).

The modern Balto-Finnic languages have developed possessive pronouns which are genitive case forms of the personal pronouns, e.g., Finnish minä/ minu- 'I', minu-n 'my' (genitive case ending n). Serebrennikov (1973) regards this as the younger formation type. The older formation of possessive pronouns in Finno-Ugric languages consists of the stems of the personal pronouns with attached possessive suffixes, e.g., Erza dialect of Mordva sonze 'his/her/its', (son 'he/she/it' and -ze 'possessive suffix, 3rd singular'). The Ugric branch uses other ways to express possession. At this point let it suffice to say that the category of possessive pronouns is a secondary development in Finno-Ugric languages, and represents a relatively young formation.

2.3. Reconstruction and historical development of the person markers.

The handbooks on Finno-Ugric languages treat the reconstruction of the proto-forms of the person markers as established. Consequently, they do not provide a thorough discussion of the development of the present-day reflexes. Mark (1925) discusses the development of possessive suffixes in the Balto-Finnic languages, but a great deal of his information is controversial, and he overlooks a number of central issues. This section of the paper treats those issues that must be investigated in determining the proto-forms of the person markers. The discussion is based on the data provided in the handbooks and in those articles that were available during the preparation of this paper. Many details have been omitted because of a lack of complete information. Finnish developments have been treated in more detail, because more source information is available about Finnish and because Finnish evidence may be particularly significant considering the archaic character of the language.

2.3.1. Shape of the proto-forms.

Most scholars agree that there existed two basic syllable types in Proto-Finno-Ugric: V and CV. Most roots were bisyllabic of the type CVCV; only the pronominal roots have been reconstructed as monosyllabic, CV (in some cases V).

The investigation of the reconstructed "person markers" indicates that these might not have been "roots" in the proto-language, but enclitic particles of the type CV. As will be seen later in greater detail, the independent pronouns, both personal pronouns and demonstrative pronouns, were formed from these CV type clitics by attaching them to a 'neutral base' (cf. Forchheimer 1953:8). 'Neutral' means neutral as to person, the deictic particle indicating person in these pronouns (see section 2.3.4 for further discussion).

As becomes obvious from Tables 1-3, the modern reflexes of the prehistorical morphemes are not always CV or C (with the loss of the final vowel), but some forms are of the type VC or VCV. What has happened in the history of some languages, especially in Hungarian and Ostyak, is that word-final vowels are lost. Therefore, there was a morphophonemic alternation in the stem morphemes: the final vowels were preserved in those cases where a suffix (e.g., a person marker) followed. In the course of the time, the vowel came to be reinterpreted as a part of the person marker, and certain vowels came to be associated with certain person markers. Certain suffixes combine with the verb stems as a result of vowel contraction. (The handbooks interpret these cases as a preservation of the stem vowels in the cases where there would be a consonant cluster.)

2.3.2. Vowels

As tables 1-3 indicate, the vowels in the present day person markers vary greatly, and the whole range of vowels (a, e, i, o, u, ü, ä, ö) can be found. One of the problems for the reconstruction of proto-forms is whether one should reconstruct one vowel for all persons, and if so, which one.

Most Finno-Ugrists have established the vowel as being [+Front] without specifying its exact quality. The basic reason for this decision may have been that the archaic member of the language family, Finnish, has a front vowel in these morphemes, either e or i, depending on the form. (Note that the third person subject agreement markers are of secondary origin, as will be discussed later.) The other reflexes have been generally considered vowel harmony variations in the present day language, not derived from the proto-forms through other phonological changes.

In my opinion, we should consider three major sources for these vowel alternations: vowel harmony either in the proto-language or in the individual daughter language, dialectal variations in the proto-language; different reflexes going back to different proto-dialects; and the possibility that if we reconstruct these elements as originally deictic particles, the proto-language may have had more distinctions based on the proximity or distance of the participants in the communication situation.

On the basis of comparative evidence vowel harmony can be reconstructed for the proto-language. It has continued more or less

intact in all of the daughter languages except for the Lappish dialects, Estonian, and Zyrian and Votyak (Hajdú 1975:94). The vowel harmony in the proto-language is reconstructed as the same type as in modern Finnish, i.e., front-back vowel harmony. Hungarian and some other languages (Hajdú mentions, e.g., the eastern dialect of Cheremis and Selkup) have acquired an additional distinction, namely the rounded-unrounded vowel harmony. When deciding which vowels to reconstruct for the proto-forms of the person markers/deictic particles one has to consider the status of these elements in the language. Were they independent words or were they suffixes? Some evidence has been presented that indicates the status of the person markers as independent words because the initial consonants have undergone the changes of word-initial consonants, not word-internal (Barczy 1963). If the elements were independent words, they would not participate in vowel harmony, and therefore they would have either had only one shape, one allomorph, in the proto-language, the present reflexes being due to different proto-forms, either dialectal variations or different deictic particles. It seems reasonable to assume that the elements were not suffixes but enclitic particles in the proto-language, which explains the development of the initial consonants as word-initial segments. Because the daughter languages can be shown to have inherited vowel harmony from the proto-language, the present vowel harmony alternations cannot be used to argue for the status of person markers/deictic particles as suffixes in the proto-language. The suffixation can represent a parallel development in the daughter languages.

The reason the status of the "person markers" as suffixes or as independent words has caused discussion is the fact that the Proto-Finno-Ugric language has been assumed to have had a restriction with respect to which vowels could occur in a word outside the first syllable. All the reconstructed vowels could occur in the first syllable, but most scholars agree that the non-first syllables could have only *a*, *e*, or *ä* (*ä* being either low or mid lax front vowel). Hajdú (1972) for example assumes that if the first vowel in the word was palatal, then the following vowel had to be either *e* or *ä* ([*ɛ*]); if the vowel was [+Back], then the following vowel had to be *a* or *e*. According to Hajdu, *e* was a neutral vowel in the same way as in modern Finnish (in Finnish *e* and *i* act as 'neutral vowels' with respect to vowel harmony). Hajdu reconstructs therefore e.g., the first person singular marker as **me~ma*. If, however, the person marker/deictic elements can be reconstructed for the proto-language as independent words, not as suffixes, then the restrictions on the second syllable (or non-first syllable) vowel cannot be used as a basis for determining the vowel of the proto-form.

One cannot exclude the possibility that the proto-language had dialectal variation in the vowel quality of the deictic particles and that the daughter languages generalized one or the other dialect variation. Obviously this variation cannot be reconstructed.

A third possible source of vowel variations in the person markers/deictic particles might be an original distinction in the semantic function of the deictic elements, i.e., the proto-language may have made more distinctions as to the respective location of the speaker and the action/objects. Some evidence from the present day languages is given in the section on demonstrative pronouns, but on the basis of the material I have used for this paper, I cannot convincingly argue for the vowel variations in the proto-language which would be explainable only by additional deictic distinctions.

In my opinion, a further study should be carried out to investigate the development of person markers as well as demonstratives in those Finno-Ugric languages where more than three distinctions are made in the present day demonstratives such as Lappish and Samoyed (Tauli 1966:141).

Whatever the source of the vowel variation in the person markers/deictic elements, the individual languages have generalized certain vowels to certain functions. For example in Votyak where the plural marker was lost because of a phonological change, the vowel y [ü] was interpreted as a plural marker in the possessive suffixes. Mordva has the mid back vowel o in the singular form, but high front i in the plural forms (see Tables 1-3). Finnish has i in the first and second person singular but e in the corresponding plural forms.

On the basis of the above considerations I have not been able to come to any positive conclusion with respect to the reconstructed vowel segments; the traditionally reconstructed [+Front] vowel seems to be a viable solution as long as there is not enough contradictory evidence; the Finnish data would indicate a mid front vowel for the proto-form.

2.3.3. Consonants

The evidence indicates that the consonantal segments in the person markers or deictic particles can be reconstructed as *m (first person, 'speaker deixis'); *t (second person, 'addressee deixis'), and *s (third person, 'audience deixis'), but it appears necessary to re-examine some of the suggested processes that have resulted in the modern reflexes.

In this section I am going to comment on the development of those reflexes that have undergone changes of the consonant segment. This is not intended to be an exhaustive analysis of the historical changes, but a brief survey of the types of changes that have resulted in the present consonant segments in the person markers. Special attention is focused on the comments in the literature about the role of an 'n-affix' in the development of person markers.

If we look at the forms of the first person markers in Table 1, we notice very similar reflexes in all daughter languages. We can reconstruct the initial consonant as *m. In the Balto-Finnic languages,

the word-final vowel has been lost in the subject agreement markers, and the word-final consonant *m became n. A similar development is to be seen in Mordva. The problematic case is the reflex ni in these languages. Why -ni and not -mi? The first person plural form has the m-consonant. The occurrence of n in this form has been explained by the influence of an n-affix that was attached to the noun stem at an earlier stage of the language, and which preceded the actual person marker under certain conditions. Scholars disagree about what these conditions were. The existence of an n-affix in forms which contain person markers would explain several other modern reflexes in various daughter languages. Finnish scholars in particular argue for its existence. In the following I will summarize some of the arguments that have been presented in the literature.

Mark (1925) supposes that there was an n-element preceding the possessive suffix in all oblique cases (in all cases except nominative singular). In the genitive and accusative case the n was supposed to be the case ending; in the nominative plural, the suffix which indicated the plurality of the possessions. Mark explains the use of this affix in other singular cases but genitive and accusative, as an analogy from these two cases which had an n.

The interpretation of the n-affix as a marker of plurality has been accepted by many scholars, because that would support the reconstruction of *-n as a plural marker. The fact that the daughter languages show pairs such as Finnish tämä 'this' - nämä 'these'; tuo 'that' - nuo 'those' where the plurality is indicated in the segment n, has led several Finno-Ugrists to assume an *-n segment in proto-Finno-Ugric as a plural marker (e.g. Collinder 1965:130; Hakulinen 1957:60; Szinnyei 1922:52). As it is shown in a later section (3.3), the demonstratives do not support this type of reconstruction for the proto-language.

Szinnyei (Mark 1925:49) assumes that proto-Finno-Ugric had two series of possessive suffixes, one which marked singular possession ('my house'), the other which marked plural possession ('my houses'). This plural series had, according to Szinnyei, an n-affix. It is not evident, however, why this n would be generalized into singular forms.

Hakulinen (1957:73) agrees with this type of explanation, pointing out that there was a basis for the mixture because several cases ended in n (genitive, accusative, instructive, illative, and allative). The singular and plural were not distinguished in these case forms.

According to Hakulinen, the Proto-Balto-Finnic forms of the possessive suffixes were as follows:

singular possession

1. *-mi e.g. 'my house'
2. *-ti~ð̥i
3. *-sen~zen

plural possession

1. *-nmi > *-nni e.g. 'my houses'
2. *-nti
3. *-nsen

Plural

1. *-mek~mmek e.g. 'our house'
2. *-tek~ð̥ek
3. *-sek~zek

1. *-nmek > *-nnek ~ *-mmek e.g. 'our houses'
2. *-ndek
3. *-nsek

The *Litti* dialect of Finnish has been presented as an example of the archaic state of Balto-Finnic (e.g., Wickman (1955:19). The first person singular form 'my house' is *tupam* (tupa-m), but the accusative singular form and the nominative plural is *tuvain* (< *tuša-n-me). Because of the consonant gradation operating on *p*, the nominative singular originally had a strong grade *p* because it occurred in the beginning of an open syllable: *tupa-mi 'my house'. The final vowel was lost, and it gave the form *tupam*. The accusative form had *tušan-mi where the affix *n* closed the syllable, and resulted in the weak grade *v* from *β*.⁵ The weak grade form can only be explained by the occurrence of a syllable-closing consonant which was subsequently lost. Therefore, the first person singular possessive suffix in Balto-Finnic languages is assumed to have developed from *n-mi > *n-ni, finally becoming *ni*.

There is a problem with the *n*-affix that has not been explicated in the literature. Do we have to assume an *n*-affix for proto-Finno-Ugric or is it only a Proto-Balto-Finnic phenomenon? If we reconstruct an *n*-element for the proto-Finno-Ugric we have to be able to explain its function. The reconstruction of *-m accusative or *-n genitive for proto-Finno-Ugric is quite controversial, as is the reconstruction of an -n type plural. These are just the grammatical elements that have been used as an argument for the existence of *n*-affix in the proto-language. Unfortunately, at this stage of research the handbooks abound with the following type of statements: "One might suppose that the...*n* is ultimately identical with the genitive ending. This would imply either that the possessive suffixes give evidence of an early stage of Proto-Uralic [PU] when there were not yet local cases, or that the local cases...have got their co-affix through analogical influence from the genitive" (Collinder 1960:302). The sound correspondences in the possessive suffixes would be easier to explain if one could propose the existence of such a coaffix *n*, not only in the Balto-Finnic languages, but in the whole Finno-Ugric family. The function of this coaffix still remains to be established. That requires a reconstruction of the case system for the proto-language, one that is not based on the preconceptions of the scholars, but on firm linguistic theory.

As a last suggestion about the origin of the n-affix, I would like to revive M. Castrén's old hypothesis (cited in Mark 1925) according to which the n-affix was "somehow connected with the first person pronoun *-m[V]." This hypothesis sounded quite far-fetched to Mark, but if we can show that *mV represented a general deictic particle in the proto-language, and that it could serve several functions, this hypothesis is not absurd at all. I cannot in this paper argue for a definite function for an -n type affix, nor even argue with surety for its existence, but the comparative evidence certainly allows the possibility that there was an affix *-n in the Proto-Finno-Ugric language which was of deictic origin. It remains to be established if it can be derived from an older form *-mV or if it represents an additional deictic element at an earlier stage.

There is an additional factor to be taken into consideration. Similar phonological changes have taken place in both possessive suffixes and in subject agreement markers in verbs. Those scholars who maintain that the -n affix was a case marker, have to propose that verb forms were actually nouns, taking case suffixes, or find another explanation for the identical reflexes. If the n element had had its origin as a deictic particle, as it will be argued for other "person markers," both occurrences of n-influence would be accounted for. But this is just a vague suggestion; at this point I am not committed to any particular hypothesis of the origin of the n-affix.

Now I would like to return to the discussion of the reflexes in Table 1. Besides the Balto-Finnic possessive suffix -ni, the suggested existence of an n-affix conditioned the sound changes in Mordva and Cheremis subject agreement markers: nok-nuk, etc. (Mordva), and na-nä (Cheremis) (*nm: *nn>n).

The first person plural subject agreement marker has lost the nasal element in Hungarian. The earliest documents from the 10th century have *mk forms (Károly:126). The j segment is a result of a levelling phenomenon; it will be discussed in the context of third person markers.

In Vogul and Ostyak, the *m segment has been denasalized in the plural forms: w occurs both in possessive suffixes and subject agreement markers, but the personal pronouns have the m element, as do the singular forms.

The second person shows more variety (Table 2). The proto-segment *t has become s in the Balto-Finnic languages, in the possessive suffix (singular), and in the personal pronoun (singular). This is a result of a regular sound change whereby *t > s / — Vowel [+Front, +High]. The Finnish second plural possessive suffix has been accounted for by the influence of the n-affix at an earlier stage: *nt > nn.

The various d reflexes in the second person are results of regular sound changes: *t > d / V - V. The Hungarian reflex d has

been used as an evidence for the position that the person markers were not suffixes in the proto-language, but independent words (e.g., Barczi 1963). The regular correspondence for Proto-Finno-Ugric *t in Hungarian is z (i.e., *t > z / V - V). Barczi explains the d reflex as due to the fact that t had become an accusative marker, and would have caused homonymy if the possessive suffix had remained unchanged. In the plural where this problem did not arise, the *t remained. Obviously there must have been other (phonological) factors that caused the change *t > d in the singular. The Finnish scholars, as well as Collinder, explain the Hungarian d reflex as a result of the preceding n: PFU *nti > *nt > d (Collinder 1960). Good historical method demands that conditions be established why the *nt cluster became d in the singular, and not in the plural, before it can be assumed that this particular change was due to the influence of the n-affix. As it has become obvious, a cross-language study is needed of the role or non-role of the n-affix in the history of person markers. The reader of the current literature on this topic gets the impression that the role of n-affix is used as a device to "explain" present reflexes without establishing the relevant conditions, and wonders, e.g., why it plays a role in some forms but not in others. "Mixed paradigms" as an explanation is not very satisfactory.

Ob-Ugric languages (Vogul and Ostyak) and Zyrian have an unexpected reflex in the second person subject agreement morpheme: n. Vogul and Ostyak have n in all person marker categories in this person. Two types of explanations have been given in the literature:

Szinnyei (1922) assumed that PFU or PU had a regular consonant alternation t~n, and these languages which show the n reflex have generalized the n alternant to all phonological environments. It has not been established, however, that the proto-language had any alternation of this type. This proposal seems to be quite arbitrary with respect to the reconstructed proto-language.

Vértes (1967) presents the opinion that n was introduced to the paradigm because phonological change in these languages had caused PFU *s to merge with *t, and thus the second and third person markers fell together. This does not, however, explain why the n was chosen as a new marker for the second person. Where did it come from? Is it possible that it was due to Altaic influence or can we explain it as an internal language change? If we could assume that the proto-language had another deictic element *n(V), the n reflexes in Vogul, Ostyak, Zyrian as well as Samoyed languages could be derived from this element directly. Scholars have suggested that the existence of the deictic element *n would explain developments of demonstrative pronouns (see section 3.3 for further discussion). Future research may clarify the history of the second person reflex -n, and its relationship with n-element in the demonstrative pronouns, as well as its possible connection with the coaffix -n.

The third person reflexes differ drastically from those for the first and second persons, because they do not seem to be derivable through phonological changes from the proto-segment *s. There is much

more variation across languages, and even inside one language, between the possessive suffix, personal pronoun and the subject agreement marker, as Table 3 indicates. Reasons for this variation are discussed in more detail in a later section (2.3.5). In this section I will comment on some regular sound correspondences of PFU *s.

PFU *s has an s reflex in initial position in Finnish, Mordva, and Permian languages (Zyrian, Votyak) and a z reflex intervocalically, except in Finnish where it always appears as s. In Cheremis, *s occurs as s in initial position, z intervocalically. In Hungarian, initial s was lost, and because the stems were of the shape CVCV, a glide developed as a transition between the stem-final vowel and the vowel of the enclitic particle (by that time probably a suffix). In the third person, j results from a straightforward sound change, but j was later generalized to other persons; compare the first person plural. In Vogul, PFU *s has a t reflex in all positions. Ostyak has different reflexes depending on the dialect (Southern Ostyak has t; Northern, l; Eastern, j; λ (lateral spirant) and č also occur in some dialects. The third person personal pronoun occurs therefore as teu/luw/yoy/λou and variations of these depending on the dialect group. (Vértes 1967 has a detailed listing.) These reflexes are repeated here because the handbooks sometimes give confusing information about the sound correspondences. I do not know how much dialect mixture is involved in the person marker systems in Ostyak, but at least we can distinguish the regular correspondences in each individual dialect.

2.3.4. Personal pronouns

In my opinion, the main function of the deictic particles in the proto-language was to mark the focus of the sentence. The particles could be attached to verbs or to nominal elements, or they could occur at the end of the whole sentence. At an earlier stage, pronominal subjects were not overtly expressed. In an SOV language (as PFU has been reconstructed), the agent or subject was indicated in the verb. In my analysis, the enclitic deictic particle attached to the verb served this function. Finno-Ugrists have pointed out that the personal pronouns were expressed only for emphasis. That would mean that in those cases where the agent, the person performing the action indicated by the verb, was the focus of the sentence, it was expressed by a corresponding deictic element. In the subject position, the "person markers" had the shape CVCV. In the course of the historical development, those deictic particles which had become suffixes were reinterpreted as inflectional affixes, as person markers, and those in subject position as personal pronouns. In the further development of the languages, the subject agreement markers disappeared through phonological changes, and the use of the personal pronouns/deictic particles became obligatory even in those cases when the agent was not emphasized. This change seems to be connected with the word order change in these languages; the 'western' languages in this family have become SVO.⁶ In Finnish, for example, the first and second person can occur without an overt personal pronoun, but this no longer

applies to colloquial language. Personal pronouns have become almost obligatory. In literary Finnish the subject agreement markers remain unchanged; in colloquial language they have largely disappeared.

In his study The Category of Person in Language (1953), Forchheimer came to the conclusion that the affixed pronoun forms universally represented the pure pronominal elements, whereas the independent pronoun forms were formed by a base neutral with regard to person, attached to a pronominal affix. Finno-Ugric languages seem to follow this pattern, both in the formation of independent personal pronouns and in the formation of independent demonstrative pronouns.

The personal pronouns are formed by attaching the element n (+Vowel) to the "person marker" (deictic particle). This applies to the first and second person pronouns, and some third person pronouns as well, for example, Finnish mi-na 'I', si-na 'you'. In many languages the final vowel has been lost through a regular sound change, and only the final n is left from this suffix, e.g., Mordva mo-n 'I', to-n 'you'. It is quite probable that originally there were two ways of forming personal pronouns, either with the deictic particle and the suffix *na-nä, or with the deictic particle alone. This situation still prevails in Estonian where the personal pronouns have double forms mi-na ~ ma 'I', si-na ~ sa 'you' (Raun-Saareste 1965).

The origin of this *n(a) element is a somewhat controversial issue. Serebrennikov (1973) indicates that its meaning is not clear. Hakulinen (1957) claims that it is a deictic element meaning 'I here'. The same element is to be found in the locative ending na-nä, which is assumed to be one of the oldest case suffixes in FU languages. The same opinion is represented by Munkácsi (quoted by Vertes 1967) who also argued that n in the personal pronouns was a demonstrative pronoun or a deictic particle meaning 'I here', 'you there'. Hajdú (1975) suggests that this locative suffix na-nä, and also another locative suffix in PFU *-tt (or *-ta), may have been derived from demonstratives. The demonstrative attached to a noun had a variety of adverbial functions, and the suffix gradually developed a more specialized use--in this case, as a locative marker. I will return to this suffix in the section on demonstratives (3.3.).

Some languages have a different element attached to the deictic element, not *na-nä. Cheremis for example has -jo ~ jö: to-jo/töjö 'you', or Zyrian si-je 'he/she/it'. This same suffix can occur in the demonstratives. I would assume that it is of the same origin as jo- in Finnish, for example, in the pronoun joka 'which' (relative). The Samoyed languages show further patterns: in the Enets dialect, the personal pronouns are formed by attaching -či < *ti to the deictic particle: mo-či 'I', to-či 'you'.

The main pattern seems to consist of the deictic element and an additional CV sequence which is either to be analyzed as a locative suffix or a demonstrative element. It appears that the deictic or

demonstrative elements might have had a great role in the development of case markings and--as I attempt to show in this paper--other grammatical morphemes. This development was probably underway at the time of common development, in the system that is reconstructed as Proto-Finno-Ugric, but the same elements were still used for other functions as well. It is therefore possible that the Proto-Finno-Ugric language had the elements **na-nä* and **ta-tä* as demonstratives, but these elements were also used for the specific locative function. There are a great number of similar developments in pidgins and creoles where at some point in their development, a single grammatical morpheme can serve several functions.⁸ The Cheremis and Zyrian forms (with the *-jo/je* element) seem to represent language-specific developments, but they follow the basic pattern in the sense that the pronominal element (*-jo* etc.) is added to the personal/deictic element to form personal pronouns.

Some scholars have analyzed forms such as Enets *toč̣i* 'you' as a reduplication. This would be a natural way to emphasize the deictic element, but the analysis is made difficult by the fact that the locative suffix had the same initial consonant **ṭ* (which became *č̣* / V - V) as the corresponding deictic element. They would obviously consider forms such as *toč̣i* as original, and *moč̣i* as a generalization of the pattern. The analysis of **na-nä* and **ta-tä* as locatives (whether derived from demonstratives or not) gives a more consistent picture of the patterns of formation in both the categories of personal pronoun and demonstrative pronoun. Reduplication in some cases might have been a way of forming an emphasized form of a pronoun, but it was probably not the basic pattern of pronoun formation.

The Hungarian first person singular pronoun differs from the general pattern: *én* 'I'. Two explanations have been offered: it is derived from **e-me-n* where *e* represents a demonstrative root, and *me* the old Uralic first person marker (*n* would obviously be of the same origin as in the other pronouns). The second way to account for this form would be that it is a secondary Hungarian development where the demonstrative pronoun **e* has been suffixed by the pronominal suffix *-n* (Szinyei 1922, Collinder 1960).

2.3.5. Third person

The special status of the third person has often been pointed out by linguists. Lyons (1971:276) comments on the fact that the third person has to be distinguished from the first and second persons in several respects. The speaker and hearer are necessarily present in the situation, whereas other persons and things to which reference is made may not only be absent from the situation, but they may also be left unidentified.

In a certain sense, the third person is the "primary" category; it is the unmarked category, and can only be called a "person" with

reference to the first and second persons. Many languages have no "personal pronouns" for the third person. Either the person is completely unmarked or a demonstrative pronoun is used for this function. Estonian and Cheremis in the FU family are examples of the use of demonstratives in the third person.⁹

The elements referring to the speaker and the addressee are inherently definite. But the third person may also be identified only by using the zero marker, to distinguish it from the first and second person, but not by marking it definite.

Hajdú (1972) describes the function of the third person subject agreement marker *se, which is different from *me and *te. The first person suffix *me and the second person suffix *te referred to the subject of the verb. In the third person, there was no need to specially indicate the subject. The zero suffix alone indicated that it did not refer to the speaker or the addressee. Therefore, whenever *se appeared, it did not refer to the subject of the verb, but indicated an indirect reference to the object of the verb. It was used to mark the definite object of the verb. Hajdú calls this attachment of *se "a pronoun with the value of an accusative" (p. 44).

If we interpret the grammatical elements under discussion as deictic particles which came to be used as focus markers, the differing patterns in the third person can be analyzed in a systematic way. The present Finnish system includes an interesting type of a sentence which has been called an 'impersonal' or a 'generic' sentence. (See Hakulinen and Karttunen 1973 for a detailed synchronic analysis of this type of sentences.) These sentences correspond to English sentences which have the impersonal 'you' or 'one' as the subject. Such sentences are still very common in Finnish. The subject constituent is missing in these sentences; the verb is in the third person singular. It is possible that this particular type of sentence corresponds to the PFU sentence type where no deictic element was attached to the VP constituent. It was a general statement that did not refer to any location in the situation of the utterance.

Based on the information in the handbooks, the reconstruction of tense markers for Proto-Finno-Ugric seems to be problematic. Although Serebrennikov's argument is speculative to say the least, he seems to be right in assuming that PFU did not have tense marking, but that it marked aspects instead (Serebrennikov 1973). One can reconstruct elements that marked continuous, iterative, accomplished, etc., action.¹⁰ When there was no deictic element attached to the VP (i.e., when the utterance was just a general statement, not defined in terms of the speech situation), the verb form consisted of the verb stem plus the aspect marker. After the person markers had developed as a category, the aspect markers were analyzed as person markers in those cases where it was felt that the person marker was "missing" (i.e., in those cases where there was no deictic particle). This led to two major trends--the development of subjective conjugation markers in some languages, and in others the development of the third

person subject agreement marker from aspect markers. There are languages, such as Zyrian and Votyak, which do not have two conjugation systems but still have two forms in the third person: one with the reflex of the deictic particle **sV* and the other without it. In Zyrian the form without the deictic particle came to be interpreted as the present tense, while the form with the deictic particle was reinterpreted as the future tense.

The subjective/objective conjugation distinction is discussed in a later section. At this point I would like to discuss the development of the third person markers in the Balto-Finnic languages. As Table 3 indicates, these languages show the most divergent reflexes in the third person. I will first discuss the third person subject agreement markers, and then the personal pronouns.

The details have not been explicated, but it has been suggested that the Balto-Finnic **pa-pä* which gave rise to both the third person singular subject agreement marker and to the present participle was originally used to mark a continuous, progressive action. In the present tense third person singular **a ~ ä > i /-- #*, while the participles still have *-a-ä* in Finnish. Anttila (1972:351) calls it a grammatical conditioning of a sound change which took place in the predicate verbs.

There was another alternation at an earlier stage of Finnish: *p ~ β*. After a stressed syllable, the bilabial stop *p* occurred; after an unstressed syllable, the bilabial fricative *β*. This alternation occurred in both the third person singular present tense and in the participles. There are attested forms from Old Finnish (16th century) in which this alternation can be seen: *sööpi* 'eats'; *kúmartäpi* 'bows'; *ántäβi* 'gives'. The primary stress is on the first syllable, a secondary stress on the third (Ruoppila 1967:47). As a result of levelling, *va-vä* (in the participles) and *vi* (in the present tense third person) were generalized whatever the stress situation obtained. The texts also give examples of the next stages in the development of the third person forms: *ottavi* 'takes' becomes *ottav* and further *ottau* and *ottaa*, which is the current form in Finnish. Through this process, the lengthening of the stem-final vowel became the third person singular marker.

Estonian has the third person singular present tense marker *b* which developed from **pa-pä*. The participle marker is *v*: *tulev* 'coming' (present participle); *tuleb* '(he) comes'. Here the different alternations were assigned to different functions; in Finnish, where the final vowels were retained, the vowels carry the distinction.

The third person plural forms have the noun plural suffix *t* attached to the singular forms. The plurals had the weak grade because *t* closed the syllable: *βat-βät* which became *vat-vät*. Estonian has kept the alternation: *palub* '(he) asks', but *paluvad* '(they) ask'.

Finnish has generalized this suffix, which originally occurred only in the present tense to the preterite as well; -vat ~ vät was interpreted as the third person plural marker. Finnish kysyy '(he) asks'; kysyvät '(they) ask'; kysyi '(he) asked'; kysyivät '(they) asked'. Estonian has palus '(he) asked' and palusid '(they) asked'. In Finnish the generalization of the third person plural present tense ending to the past tense is a very late phenomenon: 18th century literature still has he söit ja joit 'they ate and drank' (Ruoppila 1967).¹¹

As it was previously indicated, the PFU verb forms that had the deictic particle *sV attached to them developed differently in the daughter languages. In some cases the deictic element developed specialized functions because it was not required to mark the speaker or the addressee. In other cases it developed into a definite object marker in objective conjugation, a future tense marker in the third person, or it could become a regular third person singular marker, as *mV and *tV had developed into the first person and second person markers. At first sight, Finnish does not seem to have any reflex of this *sV particle as a verbal suffix, but in a further analysis paraphrases of the following type are found:

- a. Sen työn tekee helposti (impersonal, generic sentence)
that job does easily 'that job one does easily'
(acc.)
- b. Se työ tehdään helposti (passive sentence)
(nom.) 'that job is done easily'

The form (b) represents the "impersonal" passive in Finnish. Historically it is derived from *teke-tä-sän (verb stem teke-; causative suffix -tä; 3rd singular 'person' marker -sän). It is therefore possible that the PFU *sV deictic element developed into an "impersonal" passive suffix in Finnish. At this moment, I am unable to present historical evidence about the passive formation in other FU languages.

Some examples from doublets in Southern Estonian dialects where the third person singular can occur without any person marker are: jaga 'distributes'; and 'gives'; lät 'goes'; näge 'sees', or with a suffix -s: eläs 'lives'; kaes 'looks'; küzüs 'asks'. Posti (1963) has characterized the differences between these two groups as being due to the semantics of these verbs. *sen occurs with those verbs which refer to an action by which the subject has a personal involvement, e.g., kaes 'looks at' compared with näge 'sees'. The indicated action refers to the subject of the sentence. This corresponds to the meaning of the mediopassive in IE languages. Posti considers this Estonian situation to be the original one; other Balto-Finnic languages have developed passives from these forms, others such as Karelian developed reflexive forms.

The function of the -n in passive forms is problematic. It has not been fully explained. Hakulinen (1957:174) suggests that

the -n could be a dual marker that occurs in the suffixes, but why would it only occur in this one form? He does not bring any evidence from other languages. It could be of the same origin as the -n in personal pronouns. We have to determine, however, the historical development of these forms in greater detail.

If we look at the personal pronouns in the third person in Finnish, we find that the corresponding forms are hän/se. Finnish is the only Finno-Ugric language that differentiates human/non-human in the third person: hän 'he/she'; se 'it'. In colloquial speech, se is used for both functions.

Posti (1953:61) discusses the s~h alternation in Balto-Finnic. According to him, there was an s ~ z alternation in Baltic Finnic corresponding to the k ~ γ, t ~ ð, p ~ β alternation (cf. p. 99). *z occurred in the beginning of a closed syllable intervocalically, and also after any unstressed vowel. *z became h by the end of the Late Balto-Finnic period. After the change *z > h, an s ~ h alternation arose, but at this stage levelling occurred in most paradigms because the speakers did not feel these sounds closely related. There are some relic forms of this alternation in Finnish: mies 'man' alternating with mieh-en 'of the man' (genitive).

The problem is how to explain the h in the independent position, since the s ~ z alternation only took place intervocalically. Posti's explanation is that it occurred because of the frequent use of the pronoun in unstressed position where the initial s became h in the same manner as the medial s became h after an unstressed vowel.

I would like to suggest that there was reinforcement from Swedish: Swedish has han/hon 'he/she', and it is possible that the strong Swedish influence reinforced the use of han for persons in the situation where the form was already in the system even if it did not occur independently in this form. The form -han~-hän occurred in the verbal paradigm as a marker of the impersonal passive. In the 18th century there were still forms anneta-han 'is given' (<*anneta-san); the present form is annetaan).

Vértes (1967) suggests that han was introduced because of the phonological change *t > s / — i, and *tinä had become sinä; therefore the third person *se/si- fell together with the second person. She assumes that -n in the modern form (hän) is the same -na~nä suffix as in the first and second person, the final vowel having been deleted.

There is one more problem that does not appear to be discussed in the literature: why does hän have an -n, but not se? Other FU languages have -n in the third person pronouns, for example, Mordva son. If we interpret the -n as a part of the local suffix that was used to emphasize the independent pronouns, we might conjecture that the third person deictic element differed from the first and second in that it could also be used attributively, e.g., se poika 'that boy'. It may be possible that the attributively used forms did not

have the *-n+Vowel suffix. The same phenomenon occurs in the demonstrative pronouns where tämä 'this' has the structure CVCV, but tuo 'that' does not have any additional suffix. Tuo may be a generalization from the attributive form.

2.3.6. Plural and dual forms of the person markers

The plural forms of the person markers/deictic particles can be reconstructed as having been formed by attaching the suffix *-k to the corresponding singular forms. This plural marker is found in the surface forms in Mordva, Ostyak and Hungarian, as well as in dialectal forms in Livonian. Several other reflexes can be explained in various languages by postulating this *-k element in the plural forms. For example, in Balto-Finnic, the vowel in the deictic element became [+High] in word-final position, but in the plural forms it did not change because of the final -k; therefore the singular form has mi-, but the plural me-. After the loss of the -k element, several languages morphologized a vowel alternation as a marker of the plural, for example Mordva has the singular forms, mon, ton, son 'I, you he/she/it', but the plural forms min, tin, sin 'we, you, they'.

Some scholars have tried to establish the origin of the plural marker *-k. They suggest either that it was derived from a dual marker *-ka which was derived from the numeral *kakte 'two', or that the plural marker is of the same origin as the derivational suffix *-kk (e.g., Finnish kuusi 'fir-tree', kuusi-kko 'a group of fir-trees'). Hungarian and Cheremis show a reflex of this *-k in the marking of noun plurals, but other FU languages mark plurality in different ways in noun plurals than they do in person markers (cf. section 3.1.3.). Comparative evidence indicates that *-k was used as a plural marker in connection with the deictic particles/person markers, but further research is needed to determine its origin.

The dual exists in the Lappish, Samoyed, and Ob-Ugric languages. Décsy (1965) denies its existence in PFU or PU, but Hajdú and Collinder reconstruct a dual marker *-ka~kă(n) (< *kakte 'two') (Hajdú 1975:84; Collinder 1965:131). It is not at all clear how the present forms would have evolved from these reconstructed forms, because most reflexes show no sign of a *-ka element.¹² Hakulinen (1957:57) assumes that PU had a dual in its system, but its use was limited to 'special cases'. He does not elaborate what these special cases might have been. Because the languages that would be crucial for the establishment of proto-duals, Samoyed and Lappish, have been omitted in this paper, and because the dual forms do not add to the major arguments, no stand is taken with respect to the status of the PFU dual.

3. Role of the Deictic Particles in the Marking of Non-Personal Grammatical Categories.

Reflexes of the PFU deictic elements discussed in section 2 are not restricted to the three categories discussed in the previous chapter--personal pronouns, possessive suffixes, and subject agreement markers--but as I have indicated above, other grammatical morphemes represent reflexes of these deictic particles. In order to better elaborate the development of the morphological marking of certain grammatical categories in the FU languages, it is proposed here that these deictic particles, which originally referred to the participants in the communication act and to their location, came to be used as definiteness markers, in order to indicate the focus of the utterance. In subsequent developments, these same elements came to be interpreted as, on the one hand, person markers, and, on the other hand, accusative markers, plural markers, etc. The major characteristic associated with the entire set of reflexes considered here is definiteness.

Definiteness is generally analyzed as an inherent feature in personal and demonstrative pronouns. Demonstratives and third person pronouns are universal definiteness markers. Definiteness indicates something that is identifiable: the addressee can identify the particular referent the speaker has in mind. In the case of the deictic particles that refer to the closeness of the object to the speaker and/or the addressee, the identification is established by the situation. Definiteness can also be established by linguistic phenomena in the domain of a discourse when reference is made to some object which has been previously mentioned (further discussion, e.g., Moravcsik, 1969; Chafe 1976).

We can distinguish two types of definiteness markers, both derived from deictic particles. The first group (which represents a chronologically older development) includes accusative morphemes, person markers in objective conjugation, the plural morpheme *-t, and the so-called 'definite declension' in Zyrjan.

These grammatical morphemes developed from deictic particles used as focus markers in the utterance. The particles were placed after the focused constituent, which had the strongest stress in the sentence. Through phonological processes, the particle, which had weaker stress than the preceding constituent, became suffixed to it, and in the subsequent development of the language(s) it came to be reinterpreted as an inflectional morpheme.

The second group represents younger formations. These definiteness markers arose in the individual developments of the daughter languages. Whether they are direct derivatives from the deictic particles or extensions of the morphemes in the first group, is difficult to determine. Examples of grammatical morphemes of this type are the definite article in Hungarian, morphemes used in the definite declension in Mordva, and some clitics in Finnish. The constituents to which the deictic particles were attached in the first group conveyed new information; in the second group the

constituents introduce given (old) information into the sentence. They can be topic markers, as are the Finnish clitics, or they can be general definiteness markers which can be used to establish the definiteness of the topic constituent.

3.1. Older developments in the marking of definiteness.

3.1.1. Accusatives.

There has been a controversy over whether an accusative case can be reconstructed for the PFU. Hajdú, for example, supposes that the accusative case in **-m* existed in PFU (Hajdú 1975:80). Other scholars have attempted to find various explanations for the occurrence of an **-m* marker in some languages, and for the lack of it in others.

It is a generally accepted view that **-m* marked only definite objects; indefinite objects in PFU were unmarked morphologically (Wickman 1955). The word-order for PFU has been established as SOV, which means that in the unmarked order subjects were placed in initial position. There is a universal tendency for subjects to be definite; they are generally the topic of the sentence. Objects were part of the new information, the comment. They could, however, become the focus, the emphasized part of the sentence. In that case they had to be specially marked. The focused object came to be marked by the deictic particles.

The object marker **-m* does not exist in Hungarian and Ostyak, but these languages mark objects by *-t* (Ostyak marks only personal pronouns), which can be derived from a deictic particle. (Wickman 1955:73 agrees with other scholars that the Hungarian *-t* accusative marker was originally a demonstrative element.) Finnish marks the accusatives of personal pronouns with *-t*. It is therefore reasonable to suggest that at some stage in PFU, there was variation in the marking of the definite (focused) object by a deictic element, either **mV* or **tV* or **sV*. This variation would apparently depend on the location of the object relative to the speaker. These elements lost their deictic meaning, and came to be interpreted as accusative (i.e. object) markers. In each language, one of the deictic elements was generalized. Considering the central role of the speaker in the communication situation, it is understandable that the 'first person' element was most generally regularized for this function. One must also consider the possibility that if these deictic elements, having had a general definite-marking function in the proto-language, came to be interpreted as inflectional morphemes in individual daughter languages, each of the particles may have been interpreted as a different type of inflectional morpheme (e.g., one was interpreted as an object marker, another as a plural marker).

In the modern Uralic languages there is typically no single morphological form that marks all direct objects and only direct objects. Comrie (1975) claims that there is an operating principle that the subject and the direct object are distinguished from one another in those circumstances where confusion is likely, and not

(necessarily) otherwise. Comrie calls this type of languages 'anti-ergative', because they mark the object in those circumstances and not the subject, as ergative languages do. Comrie's analysis may account for the synchronic facts, but historically, the object marking seems to be related to the marking of the focus of the utterance.

In light of these general comments about the origin of the FU accusative, I would like to review some of the descriptions of the accusative markers of individual languages to show how these facts might be accounted for by a hypothesis that PFU marked focused, definite objects by deictic particles which also served other major functions in the language.

Balto-Finnic and Cheremis reflexes are straightforward: $-\underline{n}$ ($*\underline{mV} > \underline{m} > \underline{n} / - \#$), and $-\underline{m}$ respectively. Mordva has a palatalized nasal \underline{n} which is not a regular reflex of $*\underline{m}$. It has therefore been problematic for the Finno-Ugrists. Wickman, for example, considers this reflex unexplained (1955:39). If, however, we assume that \underline{n} developed from a deictic particle which had a palatal vowel [e.g., $*\underline{mi}$], the palatalization is a reasonable process, especially considering that palatalization is a very common process in Mordva.

In the Permian languages, Zyrian and Votyak, the final $-\underline{m}$ was regularly lost. By another rule, final vowels were lost in disyllabic words. However, the fact that final vowels occur in accusative forms suggests the earlier occurrence of final $*-\underline{m}$. Hence accusatives and nominatives are kept distinct even though the original accusative marker was lost, for example, Votyak murt 'man' (nom. sg.); murte (acc. sg.). The final e belonged originally to the stem, but it is now interpreted as an accusative marker. The use of this type of an accusative is limited to only a few nouns and pronouns (Wickman: 58).

There is another definite object marker in Votyak and Zyrian: $-\underline{es}$ (Votyak $-\underline{es} \sim -\underline{ez}$). This marker has been identified as the third person singular possessive suffix. Wickman points out that in many FU languages the third person singular possessive suffix is used as a kind of a definite article. The vowel has been generalized as a part of this suffix, although it was originally part of the stem. Therefore in Votyak ajiz 'the father or his/her father (nom. sg.)', but ajez (acc. sg.). Wickman also reports that some dialects have $-\underline{ti}$ or $-\underline{te}$ as the object marker in the plural, which has been generally interpreted as an old PU ablative marker. Both of these object markers, es and ti/te could, however, be derived from the deictic particles $*\underline{sV}$ and $*\underline{tV}$.

As it was indicated above, the Hungarian accusative marker $-\underline{t}$ can be assumed to have its origin in a deictic particle $*\underline{tV}$. In the modern language, it is used to mark all objects, not only definite ones. Károly (1972) maintains, however, that it was first used to mark only definite objects. When the objective conjugation developed, the definiteness was marked in the verb, and $-\underline{t}$ became a general object marker, both indefinite and definite. If there is a possessive suffix

-m (1st sg.) or -d (2nd sg.), the accusative suffix is not often used (Collinder 1962). The absence of -t in words with possessive suffixes goes back to the period when -t denoted only the definite object, and the possessive suffix could denote definiteness in itself, without -t. In modern Hungarian, there is a tendency towards regularization of the -t accusative to all direct objects.

According to Wickman (1955:63), North Vogul, and Pelym dialects of South Vogul, have no accusative marking. In the other dialects there is an accusative containing the element m, either alone or mostly as a part of a suffix -mV (-ma, -mä, -me, -mi). This marker is used to indicate definite objects in those cases where there is no possessive suffix. Those scholars who have interpreted this accusative marker as a reflex of a PFU *m have considered the final vowel problematic. Collinder (1960:285) for example identifies it as a third person singular possessive suffix, but does not indicate why it would be used and why the reflex is a vowel when the third person singular possessive suffix in Vogul has a consonantal element -t. In my opinion, the Vogul object marker is a reflex of the deictic particle *mV.

Hajdú's discussion of object marking in Forest Yurak (one of the Samoyed languages) offers interesting insights into the function of the elements that have been called deictic particles in this paper (Hajdú 1960). He claims that this language does not have a regular accusative marker at all, but that possessive suffixes are also used secondarily to mark objects as their function. Mainly, it is the third person suffix -ta which is used to indicate the object. It "replaces the lost accusative suffix *-m." The possessive suffix of the second person is used for the same function. Hajdú does not clarify if and how these suffixes differ in function. He emphasizes, however, that when used as object markers, these suffixes have lost the function of marking the possessor. Hajdú makes three points: first, the use of the possessive suffix as an object marker is not consistent, unmarked objects being quite frequent (he does not specify whether there is a semantic difference between marked and unmarked objects); second, these same elements can still function as possessive suffixes in other contexts; and third, these suffixes can serve to mark the genitive case if used as attributes of nouns.

It is interesting to note that Forest Yurak has object forms which have a grammatical marker containing an m (i.e., which is identical to the first person possessive suffix). Hajdú rejects vehemently the idea that this marker could be regarded as the same type of an object marker as the second and third person possessive suffixes. According to him, the indication of possession is often there, which is not the case with second and third person possessive suffixes. It seems to me that a more detailed analysis of the Forest Yurak data might clarify the connection between -m-suffixes that Hajdú considers possessive suffixes, 1st sg., and those m-suffixes

that he views as relic forms of the old PFU *m accusative. Hajdú's report on Forest Yurak indicates that the deictic elements (he calls them possessive suffixes in this case) can have various functions even at more recent stages of the daughter languages. The same elements can function as object markers, markers of possession, and as genitive markers. Either the context or the word order disambiguates the meaning.

It is interesting that Lappish has developed a definite object marker which is -ta~-tä, a marker that is identical with the Finnish partitive case marker -ta~-tä. The partitive case in Finnish is used among other things to mark indefinite objects. Wickman proposes that Lappish developed this definite object marking under Finnish influence. It had the *m accusative marker in the singular to mark definite objects, but no marker in the plural. According to Wickman, Lappish borrowed the -ta~-tä morpheme from Finnish, and used it to mark definite objects instead of indefinites, as its function is in Finnish. One could conjecture, however, that the definite object marker in Lappish is of different origin, that it is derived from the PFU *tV instead, and has the function of a definiteness marker from the proto-language.

Both the function of accusative morphemes (to mark definite objects) in FU languages and the actual phonological shapes of this morpheme in individual FU languages can be accounted for if we assume that the elements which are used for the marking of accusatives in the modern FU languages derived from the deictic particles *mV, *tV and *sV in the proto-language.

3.1.2. Objective (definite) conjugation

In some Finno-Ugric languages, there is another means of turning the attention of the addressee to the definiteness of the direct object: the speaker may indicate the definiteness of an object by the use of objective conjugation, i.e., the definiteness is marked in verbal forms instead of being marked in the object NP. In these languages, transitive verbs have two sets of person markers, on the one hand, those of an objective (definite) conjugation; on the other hand, person markers of the subjective (indefinite) conjugation.

An objective vs. subjective conjugation distinction exists in Hungarian, Vogul, and Ostyak (i.e., in the Ugric branch), as well as in Mordva and the Samoyed languages. The two-conjugation system in these languages is not an inheritance from the proto-language, but has been determined to be a parallel development.¹³

As an illustration of the differences between the person markers in the objective and subjective conjugations, consider the paradigm of the Hungarian verb lát 'see':

<u>objective</u>		<u>subjective</u>	
sg.	1. lát- <u>om</u> 'I see (something that can be identified, something definite)'	1.	lát- <u>ok</u> 'I see'
	2. lát- <u>od</u>	2.	lát- <u>sz</u>
	3. lát- <u>ja</u>	3.	lát
pl.	1. lát- <u>juk</u>	1.	lát- <u>unk</u>
	2. lát- <u>jatok</u>	2.	lát- <u>tok</u>
	3. lát- <u>jak</u>	3.	lát- <u>nak</u>

(Decsy 1965:176)

The singular forms of the person markers (deictic particles) in the objective conjugation result from straightforward phonological changes, as was indicated in section 2.3.3. The -j has been generalized from the third person singular to all plural forms, and it has become a marker of objective conjugation. The morphemes that are interpreted in the grammatical system of Hungarian as first and second person singular person markers in subjective conjugation were originally aspect markers (cf. p.105). The aspect markers were reinterpreted as person markers in those cases where a person marker was felt to be missing.

-Sz and -l (which occurs as second person singular marker with some verbs) have been determined to be reflexes of PFU markers for iterative action. The person marker -k in the first person singular has been analyzed as an analogy from the first person plural, or of indeterminant origin (Rédei 1966; Károly 1972). I do not see any reason why it could not be a reflex of the PFU aspect marker *-k which marked continuous action. This marker has been established on the basis of cross-linguistic evidence, and has played a role in the development of person markers in, e.g., Finnish. If the second person singular person marker developed from an aspect marker, it is quite plausible that the first person marker has a similar origin; especially because we can reconstruct this particular aspect marker, *-k, for the proto-language.

The first person plural suffix -unk may come from mk which is derived from *mV_k (mk is historically attested). This is therefore a suffix that we would expect in the objective conjugation, not in the subjective one. It is possible that this suffix was introduced to subjective conjugation after the j had been generalized into the objective conjugation for all plural persons. Thus j had become a marker of the objective conjugation. There is another explanation for n in -unk. There are still relic forms in Hungarian of third person singular forms with n, e.g., hiszen '(he) believes'; megyen '(he) goes'; vagyon '(he) is'. Etymologically, they have been interpreted as nominal forms. The third person plural forms in subjective conjugation -nak (and its vowel harmony variants) are derived from this form with the addition of the plural marker -k. The first person plural could therefore be derived from this same nominal form (Rédei 1966).

As it was indicated above (in section 2.3.5), the descriptions in the handbooks suggest that Proto-Finno-Ugric had two types of verbal forms, one with the 'person marker' (which I interpret as a deictic element), and the other without any morphological person marker (or definiteness). In the analysis which I propose in this paper, the focused constituent, which could be, e.g., the object NP, was marked by a deictic particle. The reflexes of that focus marking can be seen in the accusative morphemes in the modern languages (cf. section 3.1.1.). The focused element could, however, be the whole VP constituent in which case the deictic particle followed the verb (the word order being SOV). This is the origin of subject agreement markers in all FU languages. In most Finno-Ugric languages, the deictic clitics, which became suffixes and were reinterpreted as person markers, were generalized to all finite verb forms, but in those languages that show the objective/subjective conjugations, only the verb forms in the objective (definite) conjugation have reflexes of the deictic particles.

The marking of the definite object, the inflection of the verb in the objective conjugation, and the word order of the sentences seem to have interesting interrelationships. This topic cannot be discussed in the framework of this paper, but I would like to refer to some correspondences in present-day Hungarian and Ostyak (both of which have objective/subjective conjugations). The examples are greatly simplified for the purposes of the present discussion.

Hungarian can have two basic word orders, either SOV (archaic) or SVO (innovative). The SOV order occurs in sentences which contain an object without an article, whereas the sentences with definite (or indefinite) articles are SVO. Examples:

SOV order and subjective conjugation	<u>A fiú levelet ír</u> the boy letter writes 'the boy is doing letter-writing'
SVO order and objective conjugation	<u>A fiú írja a levelet</u> the boy writes the letter 'the boy is writing the letter'

(Hetzron 1975)

Bése et al (1970) define the semantic differences between the above sentences as follows: in the sentence A fiú levelet ír the reference to the context or to the communicative situation is irrelevant. In this type of structure, the object has to be closely dependent on the predicate (i.e., semantically). In the second type A fiú írja a levelet, the object is related to the context or the situation. The identification refers to the noun a levelet, which is known from the context. The verb phrase contains a verb in objective conjugation and an object with a definite article.¹⁴

There is a third type of structure in Hungarian:

A fiú ír egy levelet
the boy writes a letter

where the verb is in the subjective conjugation, the object has an indefinite article, and the word order is SVO. This would be translated 'the boy is writing a (specific) letter. The object is specific, but is not given or known from the situation, so the subjective conjugation is used. These Hungarian examples show that the verb, or the object NP, or both, can be marked if there is some reference to the context or situation,' i.e., when it was definite, the deictic clitics were used to mark this feature. Hungarian had three ways of marking the definiteness of the object: by marking it in the verbal form, or in the object NP by -t, or the chronologically youngest way of marking, by the definite article. The object marker -t came to be generalized to all direct objects, not only to the definite ones, and it lost its function as a definiteness marker.¹⁵

According to the handbooks, there is a general rule in Hungarian that definite or objective conjugation always occurs if the sentence has a definite object. Personal pronouns are considered inherently definite, and therefore the verb should be in the objective conjugation if there is a personal pronoun object in the sentence. If the object is a third person pronoun (e.g., 'I saw him'), the verb is in the objective conjugation as expected, but if the object is a first or second person pronoun (e.g., 'he sees me'), the verb is in the subjective conjugation. According to Comrie, this is the situation in Hungarian, Vogul, and some dialects of Ostyak (Comrie 1975a). It is possible that these examples reflect an earlier situation when the situational context, the definiteness, was established by deictic particles (which gave rise to personal pronouns among other things), and the marking of definiteness can be omitted in the verb form because it would be redundant.

3.1.3. T-plurals

It has been firmly established that the Proto-Finno-Ugric language has a way of marking plurals by a *-k which was suffixed to the person markers/deictic particles (at least at the reconstructed stage). There is, however, disagreement among scholars as to whether a plural morpheme *-t can be reconstructed for the proto-language. This marker occurs in many of the daughter languages as a noun plural marker, as well as in third person plural subject agreement markers. The third person plural verbs showing this marker were originally nominal forms. Hungarian and the Permian languages (Zyrian and Votyak) do not show a reflex of this plural marker. Hungarian marks all plurals with -k; Zyrian marks noun plurals with -jas, Votyak with -jos. Cheremis shows the -t a plural in the third person subject agreement marker, but the noun plural morpheme -vlak is clearly an innovation.

There are, however, restrictions on the occurrence of the -t- plural even in those languages where it exists. Finnish, for example, has the -t- plural marker only in the nominative plural (which is identical to the accusative plural); other case forms have other plural markers (-i/-j). Décsy (1965:158) rejects the idea of a PFU plural marker *t on these grounds, and Collinder (1975:128) reconstructs a nominative plural marker *-t, and a plural marker *-i for the oblique cases (i.e., a situation which prevails in modern Finnish; e.g., talo-t 'houses' (nom. pl.) vs. talo-i-ssa 'in the houses' (inessive pl.)). It is interesting to note that no -t- plural marker occurs in cases where a possessive suffix is attached to the noun, for example, in Finnish talo 'house'; talo-t 'houses', but talo-ni 'my house or my houses'.¹⁶

Ravila (quoted in Hakulinen 1957:60) has suggested that in PFU, the plurality was marked only in the predicate, but not in subjects. As evidence, he cites constructions of the type: *lintu (singular) lentävä-t (plural) 'birds fly', where the subject is without plural marking, but the predicate has the plural marker -t. The noun plural marking developed, according to this theory, as a congruence phenomenon.

The evidence of the modern languages suggests that the PFU language did not have a noun plural marker per se. There was a way of marking plurality by *-k. Comparative reconstruction forces us to reconstruct the *-k morpheme as a suffix attached to the person markers/deictic particles. It does not, however, allow us to go further back in the history to determine the origin of this element, i.e., whether it was a numeral or a morpheme meaning 'a group of' (see p.109).

It has been argued in the previous chapters that deictic particles were used in the Proto-Finno-Ugric language to indicate the location/role of the participants in the speech situation. These particles came to be used as definiteness markers to indicate the focus of the utterance. In section 3.1.1, I argued that the definite, focused object came to be marked by the deictic particles. In different daughter languages, different deictic particles became generalized for specific functions after having lost their original deictic meaning. Present-day Hungarian, for example, has -t as a general marker of direct objects; many of the other languages have -t as a plural marker. If we analyze the plural morpheme -t in the modern FU languages as a reflex of the PFU deictic particle *tV, we can account for some problematic aspects of its distribution.

I suggest that the plural marker -t arose from the marking of the focused element in the sentence by the deictic particles. In the course of history, *tV came to be interpreted as the plural marker in those daughter languages which show it now. Whether this development took place entirely in their separate histories or started in the proto-language is difficult to determine. At least two specific facts about the use of the t-plural in Finnish seem to support this hypothesis. In Finnish, there is a distinction between 'total' and 'partial' objects. This distinction is a very complicated issue, but

one of the characteristics of the 'total' object is that it is definite. In the singular, the accusative case is used to mark the definite, 'total' object, but in the plural, the marker is -t (i.e., the nominative plural marker). It has been established that the accusative case (i.e., direct object marking) in FU languages arose in the marking of definite objects, not of all direct objects (e.g., Wickman 1955; section 3.1.1 in this paper). Why would the definite object in the plural be marked with the nominative marker, and not with an accusative case marker, i.e., why is there no accusative case marker in the plural? However, if the -t-plural marker arose from the marking of definiteness with the deictic particle *tV, and if the accusative marker also has the same origin (reinterpretation of another deictic particle *mV), the use of t in the plural to mark the direct, definite object can be explained. Originally both *mV and *tV were used for the same function, to define the location of the object under discussion, with respect to the participants in the speech situation. Later they were reinterpreted as different grammatical morphemes, *mV as an accusative marker, *tV as a plural marker. The above analysis would also explain why no -t-plural marker occurs in cases where a possessive suffix is attached to the noun. If the possessive suffix also has the same origin, being derived from a deictic particle and marking definiteness, it was unnecessary to add another "definiteness" marker, -t. Therefore we have talo-t 'houses', but talo-ni 'my houses' (the latter without a plural marker).

This analysis of the origin of the -t-plural accounts for its absence in some languages, and it also accounts for the Finnish data, where the nominative plurals which have the plural marker -t, function as definite objects, and for the fact that this plural marker is omitted in cases where the possessive suffixes occur.

3.1.4. Miscellaneous uses of the PFU deictic particles in definiteness marking

In addition to object markers, person markers in objective conjugation, and -t-plurals which can be interpreted as reflexes of deictic particles, which all share the feature 'definiteness', there are other grammatical morphemes in FU languages which seem to be derived from the same proto-elements and which have the function of marking definiteness. Such reflexes occur in Zyrian, Votyak and Mordva.

According to the handbooks (e.g., Décsy 1965), Zyrian has a 'definite declension,' i.e., a way of adding certain suffixes to noun roots to make them definite. The suffixes used are -yd and -ys, which can be derived from the deictic elements *tV and *sV (the -y-element is probably a transition glide which has been reinterpreted as part of the suffix). Décsy maintains that the forms with the suffix -ys are 'emphatically neutral' whereas the forms with -yd indicate something familiar, something personal. Examples used to illustrate the point are: mortlön 'with a person' (root mort and a case suffix -lön); mort-ys-lön 'with the person' (neutral); mort-yd-lön 'with the (nice) person'. Décsy also reports that in Votyak, adjectives can

have a suffix -ez ~ -yz (< *sV) attached to them to emphasize or intensify the semantic value of that adjective, for example, vyl 'new'; vyl'ez 'really new'.

The use of -yd in Zyrian and -ez ~ -yz in Votyak may represent an example of the usage of deictic particles which Lakoff has called 'emotional deixis' (Lakoff 1974). The use of deictic particles is linked to the speaker's emotional involvement. They are often used for vividness. Unfortunately the handbooks do not provide more examples of this special usage of deictic particles (which the authors analyze as possessive suffixes in modern languages).

Mordva shows another use of person markers/deictic particles, which in my opinion illustrates the deictic origin of person markers. Mordva is one of the FU languages which lack a copula. It has one-word sentences where the person of the subject is marked by special suffixes attached to the nouns, adjectives, adverbs or numerals which form the predicate. The grammar books call this a 'predicative declension'. Décsy (1965:192) gives an example of such a paradigm:

sazor 'sister'

- sg. 1. sazora-n 'I am (somebody's) sister'
2. sazora-t 'you are (somebody's) sister'
3. sazor

- pl. 1. sazor-tan(o)
2. sazor-tad(o)
3. sazor-t

The morphological markers used in the 'predicative declension' are derived from PFU *mV and *tV; the third person singular has a zero marker. The interesting fact about these forms is that e.g. sazora-n does not mean only 'I am (somebody's) sister', but depending on the context it can also mean 'this sister' or 'the sister here'.¹⁷

A characteristic common to both the 'definite declension' of Zyrian and Votyak, and the 'predicative declension' of Mordva is that the morphemes which comprise these paradigms are derived from elements which presumably functioned as deictic particles in the proto-language, and that they define the constituent to which they are attached in terms of its relationship to the speaker.

3.2. Later developments in the marking of definiteness

I have argued in the previous sections that in the history of the FU languages, the deictic particles had several functions, one of them being to mark definiteness, specifically to mark the emphasized, focused constituent of the sentence. There is, however, another group of morphemes that are used to mark definiteness, and which have also developed from deictic elements. This group includes the definite articles in Hungarian and Mordva, as well as certain topic-marking

clitics in Finnish. All these represent a late development in the respective languages, and all the morphemes are identical to or can be derived from demonstrative pronouns (or personal pronouns).

3.2.1. Definite articles

Vennemann (1975:298) discusses the development of definite articles from demonstratives, and maintains that definiteness is closely related to topicality. Verb-last languages do not have articles. According to him, articles develop through a non-deictic, anaphoric use of demonstratives in TVX (Topic - Verb - Verb Complement) languages.

In the Finno-Ugric language family, only Hungarian has developed genuine definite articles. The development has often been assumed to represent an Indo-European influence on Hungarian, but if one compares the grammatical systems of other FU languages, the development of articles in Hungarian can be seen to be based at least in part on internal changes in Hungarian, especially the word-order change from SOV to SVO. The use of the Finnish clitic se with or without the demonstrative se (which is discussed in the next section) might be an early stage in the development of a definite article. Whether Hungarian went through a similar stage cannot be determined from historical records. On the other hand, the use of se in colloquial Finnish as a definite article could also be a result of Germanic, especially Swedish, influence. The development of definite articles out of demonstrative pronouns is not a very drastic historical change in either case, because demonstrative pronouns provide a source for definite articles universally. The following discussion only demonstrates that the definite articles in FU languages have a similar history.

The definite article in Hungarian has two morphophonemic alternants: a (before a consonant) and az (before a vowel). Collinder and Károly explain it to have developed from the demonstrative pronoun az 'that' (the z comes from PFU *tV) (Collinder 1960; Károly 1972). The definite article developed as late as the 12th century. In the early stages, the demonstrative pronouns were used together with the articles, for example, azt az ember 'the man' (actually 'that the man', acc. case). The handbooks do not indicate whether this type of double marking occurred in all positions in the sentence. Definite objects were traditionally marked in all FU languages. It would be interesting to determine whether a correlation exists between definite objects and double marking with the definite article. A further analysis of the earliest Hungarian texts might shed light on this aspect.

Mordva has a suffixed enclitic article ('definite declension') which has four shapes: s' (in the nominative singular); t' (in the genitive singular); n't' (in the other singular cases); n'e (in the plural). Décsy (1965:192) derives them from various demonstrative

pronouns: s' from s'e 'this'; t' from t'e; n'e from the demonstrative pronoun n'e 'these'. The sources do not indicate whether the clitic articles represent similar reflexes of the proto-elements as to those of the present demonstrative pronouns, or if they are in fact such late developments that they are directly derivable from the demonstrative pronouns.

Other FU languages do not have articles, but according to grammar books, they can use possessive suffixes (especially 3rd sg. and 2nd sg.) as articles. Such use of possessive suffixes is characteristic of Zyrian, Votyak, Cheremis, and Vogul and Ostyak (Collinder 1960). Collinder claims that in the above-mentioned languages, possessive suffixes have two functions, one of marking possessors, and the other of functioning as a definite article. He claims that the context makes it clear which usage is intended. However, no clear examples of this distinction are given in the handbooks. It is possible that the marking of definiteness through possessive suffixes (even after they have lost their deictic meaning) indicates the process through which FU languages eventually develop genuine definite articles.

Finnish has no articles, and neither are possessive suffixes used for this function. In colloquial language, the third person pronoun se can be used in a similar function, more rarely the other two demonstratives (corresponding to 'this' and 'that'), i.e., they can lose their deictic meaning. Because these morphemes still function as demonstrative pronouns, only the context and the stress will indicate whether (or not) they have deictic meaning in any particular situation.

3.2.2. Finnish clitics

It was mentioned above that the morpheme se (deictic particle for 'audience deixis'/third person) can be used in colloquial speech as a definite article, although this use is not yet accepted in the standard language. It is very interesting that the same element can appear either before a noun or after a noun, or simultaneously in both positions. Se poika can mean 'that boy' or 'the boy'; poika se osti auton 'the boy bought a car' or 'it was the boy who bought the car'; se poika se on suosittu 'that boy is (really) popular', or 'it is that boy who is (really) popular'. The enclitic se is used to topicalize the preceding constituent.

There are at least three unaccented morphemes in Finnish which have developed from the third person deictic particles: se, sitä, and -han ~ -hän (sitä is the partitive case form of se). They all indicate something that is clear, self-evident, well-known in the particular situation. Se and sitä are free morphemes, -han ~ -hän is a bound morpheme. They all follow the first major constituent in the sentence. Examples illustrating the use of these clitics: sinä se olet onnen poika 'it is you who is the lucky guy'; poikaa sitä viedään vihille 'it is the boy who is brought to the altar'; kauniina

aurinkoisena päivänä sitä ollaan iloisia 'it is on a beautiful, sunny day that people are happy'; tuleehan se kesäkin joskus 'it is a fact that summer comes some time' (order of elements in this sentence: tulee ('comes', 3rd sg.) -han (clitic) se (another clitic) kesä ('summer') -kin ('also', clitic) joskus ('sometime')); teillähän sitä on rahaa 'it is you who have money'. In the last example, both sitä and rahaa are in the same case, the partitive, which might indicate that they belong together, i.e., that sitä modifies rahaa. If, however, we analyze other sentences, e.g., me sitä ollaan juotu yhdessä monet oluet 'it is us (or we) who have drunk many beers together', we see that sitä topicalizes me 'we', and there is no partitive case noun in the sentence.

The above-mentioned clitics represent a late reflex of the PFU deictic elements. It would be interesting to investigate whether other daughter languages show similar developments whereby former deictic elements come to be used as topic markers. Further study is needed to clarify the history as well as the synchronic analysis of these topic markers.¹⁸

3.3. Demonstrative pronouns

I have claimed above that a great variety of forms in present FU languages are derived from three deictic particles whose broad functions in the proto-language were reinterpreted in several ways. In this section, I will briefly consider some features of the demonstrative pronoun system in FU languages in order to identify other reflexes of these deictic elements in the modern demonstrative pronoun systems.

Finnish has a three-way distinction in demonstratives: tämä 'this'; tuo 'that'; se 'that yonder' (corresponding to the three-way distinction in personal pronouns). It is difficult to determine from the information the handbooks present whether the three-way distinction occurs in other daughter languages, because one and the same term can be translated as 'this', 'that', or 'it'. Without first-hand knowledge of the languages in question, it is difficult to ascertain the exact function of any demonstrative in the language. It is made more difficult by the fact that the literature I have consulted is written in German or English, which have only a two-way distinction, this vs. that, since the translations may be affected by the language used in the description. Vértés (1967) presents extensive data on demonstratives in Ostyak dialects, and several dialects exhibit a three-way distinction, similar to Finnish (e.g., Scherkaly dialect tam 'this' ('dieser'); tom 'that' ('jener'); sí 'that' ('der')).

Traditionally *t- has been reconstructed as an initial consonant segment for the singular demonstratives, *n- for the plurals. Besides Finnish (tämä/nämä 'this/these'; tuo/nuo 'that/those'; se/ne 'that/those, "3rd person"'), other languages show t/n correspondences, for example Erza Mordva t'e/n'e 'this/these'; Cheremis has tə or təče/nəne 'this/these' (Tauli 1966:245). The occurrence of -n in plural

demonstratives has caused some scholars to reconstruct an **-n* as a plural marker for the proto-language (e.g., Szinnyi 1922). More recent studies have shed new light on this issue, however, and scholars tend to agree that **n-* represents another deictic element in the proto-language, and not a plural marker (e.g., Tauli 1966; Collinder 1965; Hajdú 1975). The Permian-Finnic languages have just simply generalized the deictic element **n-* with the plural meaning.

Hajdú (1975) points out the striking similarity between the two proto-segments for the demonstratives, **t-* and **n-* on one hand, and the reconstructed locative suffixes **-na ~ -nä* and **-tt(*-tV)* on the other hand. He supports a theory according to which locative suffixes developed from demonstratives. The same locative suffix can be found in the personal pronouns, for example *mi-nä* 'I' in Finnish.

Vértes (1967) has also commented on the reflexes of PFU **t-* and **n-*. She claims that the locative suffixes developed from demonstratives, but furthermore, she emphasizes that in various languages **t* and **n* developed different functions, i.e., they were reinterpreted in different ways. In 'western' languages, i.e., mostly the Permian-Finnic group (and Hungarian), **n* became part of a locative suffix, and **t* came to be interpreted as the second person marker (cf. the earlier discussion), but in the Ob-Ugric languages (and Samoyed) **n* became the second person marker, and **t* a locative suffix. These facts have led Collinder to assume that the proto-language had two morphemes (which he calls personal pronouns) which referred to the addressee, **tV* and **nV* (Collinder 1965). Whether the deictic elements which contained the initial **t-* and **n-* both referred to the addressee, or whether they were semantically differentiated in the proto-language, is difficult to determine. The occurrence of an *n-* reflex in so many forms of person markers and demonstratives (cf. the discussion about the role of the *n*-affix and the *-na ~ -nä* suffix in personal pronouns) suggests that the proto-language had a deictic element **n*. It has not been determined whether this element was derived from **mV* as Castrén suggested (relating to the speaker), or whether it had some other deictic meaning. In any case, there does not seem to be any reason to reconstruct **n-* as the plural marker in demonstratives, or to assume that **n* was a plural morpheme in any case.

I have so far discussed only the initial segments of the demonstratives. The demonstrative particles have been reconstructed with the shape CV in the proto-language. The vowel quality has been morphologized to mark semantic distinctions. Finno-Ugric languages show a general tendency in the system of demonstratives to have a front vowel in demonstratives which indicate proximity to the speaker (i.e., **te/ti*; **ne/ni*) and a back vowel in those demonstratives which indicate a further distance (i.e., **ta/to*, **na/no*) (Hajdú 1975). Examples that illustrate this are Finnish *tämä* 'this' vs. *tuo* 'that' (< **too*); Mordva *te-* 'this' vs. *to-* 'that'. This semantic value of vowel quality is not absolute, however. The examples in grammars indicate that many languages have front vowels for demonstratives which denote distance from the speaker, and back vowels in those that indicate

proximity, e.g., Zyrian and Votyak ta 'this', Zyrian ti 'that'. The reconstruction of front and back vowels for the proto-language (as markers of semantic distinctions) does not seem to be justified. The present-day demonstratives may rather represent language-specific developments.

It is not inconceivable that the proto-language could have distinguished more locative oppositions with respect to the speaker and the addressee than the basic three-way distinctions. Some modern languages show such a system. Lappish shows five terms, the Samoyed languages have even more. They mark the location of the objects which are closer to the speaker than to the addressee; or objects which are in the same location as the speaker or the addressee. For example, Norwegian Lapp had dāt 'this here'; dāt 'that, this' (with a weakened demonstrative meaning); diet 'that (nearer to the person addressed than to the speaker)'; duot 'that one over there'; dōt 'that one far away over there' (Tauli 1966:141). A Northern Häme dialect of Finnish makes a similar distinction tämä 'this, i.e., where I am'; toa 'between you and me'; tuo 'that, i.e., near you'; se 'that, i.e., further away, not necessarily in sight'. However, the individual languages do not allow us to reconstruct specific entries for the proto-language.

There are two basic shapes of demonstratives to be found in FU languages: CVC(V) and CV, for example, Finnish tämä 'this' and tuo 'that'. The formation of the CVC(V) type resembles the formation of personal pronouns. A suffix is added to the demonstrative 'stem', *tV, *nV, or *sV, but the origin of this suffix is not quite clear, because the various languages show different patterns.

Finnish has CVCV shape only in tämä/nämä 'this/these' in the nominative case; in other case forms, the stem is tä-/nä- (e.g., tä-ssä 'in this, here'; nä-i-llä 'on these').¹⁹ Both tuo 'that' and se 'that, 3rd person' have only the CV shape. It is possible that tuo, se and other CV forms are derived from the unstressed forms of the demonstratives, i.e., they represent the reflexes of the original deictic particles. The sequence -mä in tämä/nämä looks too much like the deictic particle *mV to be a pure coincidence. If we look at other FU languages, we find stressed demonstratives in which the second CV sequence resembles a deictic particle, e.g., Ostyak has additional 'pronominal suffixes' attached to the demonstrative stem t-, such as -mV, -tV and -jV- tam(i) 'this'; teje 'this'; tit 'this' (Vertes 1967; all of these forms would not occur in the same dialect). Mordva has tona 'that' (cf. mon 'I'; ton 'you'); Cheremis has tudo or tučo 'that'; Mordva also has sec'e 'that, 3rd person'. As these examples indicate, the formation of demonstrative pronouns directly parallels that of the personal pronouns. The main pattern seems to be CVCV, where the first CV consists of the deictic element and the second CV can be analyzed either as another deictic element or a locative suffix. If, as Hajdú argued, locative suffixes are ultimately derived from demonstratives, or deictic particles, we might be able to suggest that the stressed forms of demonstratives had parallel developments in the daughter languages. The variety of reflexes in the modern languages is a result of language-specific reinterpretations of the deictic particles.

4. Conclusion

The literature on FU languages contains sporadic comments on the 'similarity' between person markers and certain grammatical morphemes, but any explanation for this similarity has been lacking. I have shown in this paper that we can reconstruct the elements **mV*, **tV*, and **sV* for the proto-language, but if we want to account for all the instances where these elements have played a role in the history of the Finno-Ugric languages, we have to reconsider their function in the proto-language. They were neither person markers, nor personal pronouns, nor possessive suffixes in the proto-language, but general deictic particles which could serve several functions at an early stage. They referred to the role of the speaker and the addressee in the speech context: **mV* referred to anything connected with the speaker or in the proximity of the speaker ('speaker deixis'), **tV* referred to anything connected with the addressee or his location ('addressee deixis'), and **sV* to anything that was not connected with the speaker's or the addressee's location ('audience deixis').

The reanalysis of person markers as deictic particles in early FU is related to the discourse notions of focus and topic. At an early stage, the deictic particles were used, among other things, to mark the focused constituents in the sentence. In the course of the history of individual daughter languages the deictic clitics were reinterpreted as various inflectional affixes. Therefore the same proto-element can occur in a variety of functions in the extent languages.

Moreover, this reanalysis of the reconstruction of person markers also explicates the controversial reconstructions of the accusative morpheme **-m*, and the plural morpheme **-t*. These morphemes were originally associated with definiteness marking. The deictic particles marked definiteness by indicating the role/location of the object in the speech situation, i.e., with respect to the speaker and/or the addressee.

The primary goal of this paper is to show that the reconstruction of grammatical morphemes has to take a larger context into consideration. If one applies strict comparative method in the establishment of e.g., an accusative morpheme for the proto-language, one misses the generalization that can be found relating this morpheme to other grammatical morphemes which marked definiteness at an earlier stage. In the reconstruction of morphemes for different grammatical categories one has to take into consideration the fact that many categories may be internally related, i.e., that the proto-language may have had only one category which is reflected in a variety of contexts as a result of reinterpretations of the reconstructed morphemes in question.

Decisions about relative plausibility play a role in any choice between alternative reconstructions. The traditional reconstructions of the accusative morpheme **-m*, the plural morpheme **-t*, as well as the reconstruction of person markers as either personal pronouns or possessive suffixes, did not take the full function of these elements

into consideration. The explanations were not plausible within the framework of sound historical methodology.

The evidence for the reconstruction of deictic particles for the proto-language comes from the roles these elements play in the extant languages, as markers of person, as well as from the obvious formal relationship which obtains between person markers on the one hand, and other morphemes with less obvious semantic relations to personal affixes on the other. The issues raised in this paper demand an even more thorough analysis. Some closely related problems have not even been considered, e.g., the relationship of the ordering of the morphemes discussed here with respect to case suffixes. This might offer insights concerning issues of chronology in the reinterpretation of deictic particles, and concerning the development of the FU case systems, for it seems to be clear that deictic particles also play a role in the development of a number of case markers in the Finno-Ugric languages.

Footnotes

*This is a revised version of my 1977 M.A. thesis. I wish to express my sincere thanks to my advisor, Professor Robert Jeffers, who introduced me to the interesting aspects of historical linguistics, inspired me in his lectures, read several versions of this paper, and showed immense patience during all that time. I would also like to thank the other members of my committee, Professors Arnold Zwicky and Olga Garnica, as well as Professor Ilse Lehisté, for their support and kind comments. But most of all, thanks to the whole faculty of the Ohio State University Linguistics Department for the knowledge they labored so long and so hard to impart to me. I am also grateful to my husband Joe, who agreed to make our home in Columbus, Ohio, against his better judgment.

Kiitos teille kaikille!

1. As the family tree of the Uralic languages indicates (see Appendix I), Proto-Uralic includes Samoyed languages; Proto-Finno-Ugric refers to the reconstructed stage of all other Uralic languages, except Samoyed. This paper deals with Proto-Finno-Ugric, but occasional references are made to Proto-Uralic.

2. The bibliography includes all the material used for this paper. It is not exhaustive on the topic, and I admit that Finno-Ugrists may have reason to object to the exclusion of potentially important evidence. This paper is a starting point for a more extensive study. A more thorough exposure to the relevant languages is needed to re-evaluate the statements in the handbooks, and to confirm the translations of the deictic elements in the literature. Finnish examples are based on my personal knowledge of the language.

3. The terms 'focus' and 'topic' are used in this paper in an informal manner. The usage of these terms corresponds to Chafe's terms 'contrastive' and 'given.' "...They...have to do with the

speaker's assessment of how the addressee is able to process what he is saying against the background of a particular context" (Chafe 1976:27). Given information ('topic' in this paper) is that knowledge which the speaker assumes to be in the consciousness of the addressee at the time of the utterance. The focus of the contrast ('focus' in this paper) is the knowledge which is selected by the speaker from the set of possible candidates the addressee might have in mind. The focused elements are indicated in handbooks as 'emphasized elements.' As the terms are used in this paper, one sentence may have more than one focused element.

4. Finno-Ugrists use a very narrow phonetic transcription which is to a certain extent language-specific, i.e., different symbols are used to transcribe the same sounds in different languages. The handbook authors use their own simplifications in order to standardize the language-specific transcription systems. Examples in this paper have been simplified in those cases where the phonetic values of individual sounds are not under discussion. Finnish and Hungarian examples are given in their orthographic forms. The symbol â here indicates "an etymologically short a", and û indicates "an etymologically long u" (Collinder 1960:38).

5. 'Consonant gradation' refers to alternation in duration and manner of articulation between certain consonants conditioned by the structure of the syllable in the beginning of which the sound occurs. In Finnish, only certain stops (p, t, k) participate in the gradation, but in Lappish, for example, all consonants are subject to it. Modern Standard Finnish has the following alternations:

pp~p	:	huppu/hupun	'hood' (nominative singular/genitive singular)
tt~t	:	katto/katon	'roof'
kk~k	:	kukka/kukan	'flower'
p~v	:	lupa/luvan	'permission'
p~m	:	kumpu/kummun	'hill'
t~d	:	kato/kadon	'loss'
t~l	:	kulta/kullan	'gold'
t~r	:	kerta/kerran	'time'
t~n	:	ranta/rannan	'shore'
k~Ø	:	joki/joen	'river'
k~j	:	järki/järjen	'intelligence'
k~v	:	luku/luvun	'chapter'
k~ŋ	:	vanki/vangin	'prisoner'

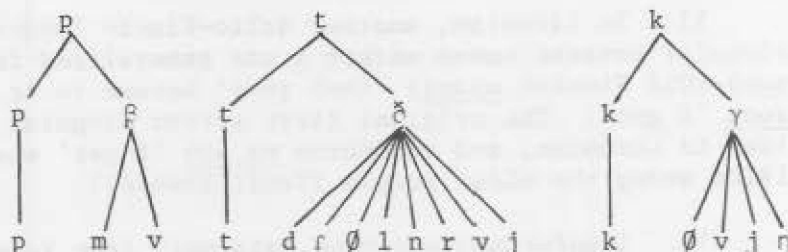
Anttila (1972) maintains that 'consonant gradation' in Finnish can be characterized as the alternation of a voiceless stop and a voiced continuant (except of course in the cases where a geminate stop alternates with a simple stop). Anttila presents three stages of the gradation. The second stage represents the Balto-Finnic gradation. Hakulinen (1957) and Posti (1963) assume that s participated in this alternation: s ~ z.

Earliest Finnish records show that d was a spirant, written dh or d (one Finnish dialect still retains [ð] for d. The variant d in Standard Finnish is a late spelling pronunciation; dialects have either ð, j, v, l, or r. *y was written gh or g (Anttila 1972).

First stage

Second stage

Third stage
(Modern Finnish
dialects)



6. "Western languages" that have become SVO include the Balto-Finnic languages and Hungarian.

7. The literary language is moving in this direction, as indicated by Hakulinen (1960:255). In the translation of one passage in the Bible, the 1936 version had 203 cases where the first and second person pronouns had been added to the 1913 version.

8. Well-known examples are e.g., the 'all-purpose' prepositions, such as long in Neo-Melanesian. I would also like to refer to Sankoff and Brown's article The Origins of Syntax in Discourse (1976) where the authors discuss the function of ia in Tok Pisin. Ia is etymologically derived from English 'here'. It is a postposed deictic marker which has an adverb of place function to some limited extent, but which is more frequently used to modify other expressions in the place deixis. Ia has, however, another function in the language: it is used as a focus marker. It can be postposed to a Noun or Pronoun and have the function of placing focus on that element. Furthermore, ia is considered a third person singular focal pronoun, i.e., it functions 'emphatically' or demonstratively in combination with personal pronouns to focus on a pronoun. The deictic particles in Finno-Ugric languages appear in similar functions at earlier stages of the languages, as will be shown in this paper.

9. Vértés (1967:192) suggests that the Estonian use of demonstrative pronouns may be due to the second and third persons becoming similar, because the second person *ti became si through a regular sound change. The demonstrative pronoun might have been introduced for clarity's sake. There is, however, no evidence that this is what happened historically.

10. Older scholars reconstructed tense markers for the Proto-Finno-Ugric language. Itkonen (1962) reconstructs the present tense marker *k, the preterite marker *j and *s. Décsy reconstructs *i(j) for the past tense, and a zero morpheme for the present tense (Décsy

1965:158). Newer evidence shows, however, that the proto-language marked aspects, but not tense. The aspect markers have reflexes in the tense markers of the daughter languages, as well as in the person markers in the subjective conjugation (e.g., Rédei 1966).

11. In Livonian, another Balto-Finnic language, the third person singular present tense marker b was generalized into the first person: soob (Old Finnish saapi) '(he) gets' became to be used also in ma soob 'I get'. The original first person singular marker *m > n was lost in Livonian, and the forms ma soo 'I get' was still common in 1920s among the older people (Tauli 1966:67).

12. I unfortunately have data only from Vogul and Ostyak. Neither of these languages show a reflex of *ka in the dual forms. Vogul has for example the following dual forms as possessive suffixes: 1. -m; 2. -n; 3. -ten, and as personal pronouns: 1. meen; 2. neen; 3. teen. Ostyak shows very similar reflexes.

13. The grammar books often define the use of the objective conjugation as follows: the objective conjugation is used with transitive verbs when the direct object is 1) a proper name; 2) a noun which has as its modifier a definite article, a possessive suffix, a demonstrative pronoun, or any other pronoun which indicates a specific object or has an all-inclusive meaning; 3) a personal pronoun in the third person singular or plural, a reflexive, reciprocal, possessive, or demonstrative pronoun or one of the indefinite and interrogative pronouns which indicate a specific object or have an all-inclusive meaning (Steinitz 1950).

14. Steinitz (1950) also indicates that the use of the objective conjugation in Ostyak is not obligatory. As an exception he mentions the case where the definite object immediately precedes the verb. With the SOV word-order, the definite object not being separated from the verb, the subjective conjugation is used. This seems to correspond to the Hungarian usage.

15. "According to the most probable hypothesis the use of -t as the mark of the object developed in the separate life of Hungarian from a determining element. At the beginning it only showed the definiteness of the object-word. Later, when the objective conjugation developed, the marking of definiteness shifted from the object-word to the verbal form, the element -t only had an objective function and as such it also spread to the indefinite object. The objective ending -t can be found in our early records: 1200: adamut, archangelt... Its use spreads in the course of the whole history of Hungarian and the scope of the old original object without an ending constantly decreased." (Károly (1972: 99)).

16. The marking of noun plurals is more restricted in the FU languages than in English; e.g., after numerals and plural modifiers, such as many, the nouns occur in the singular.

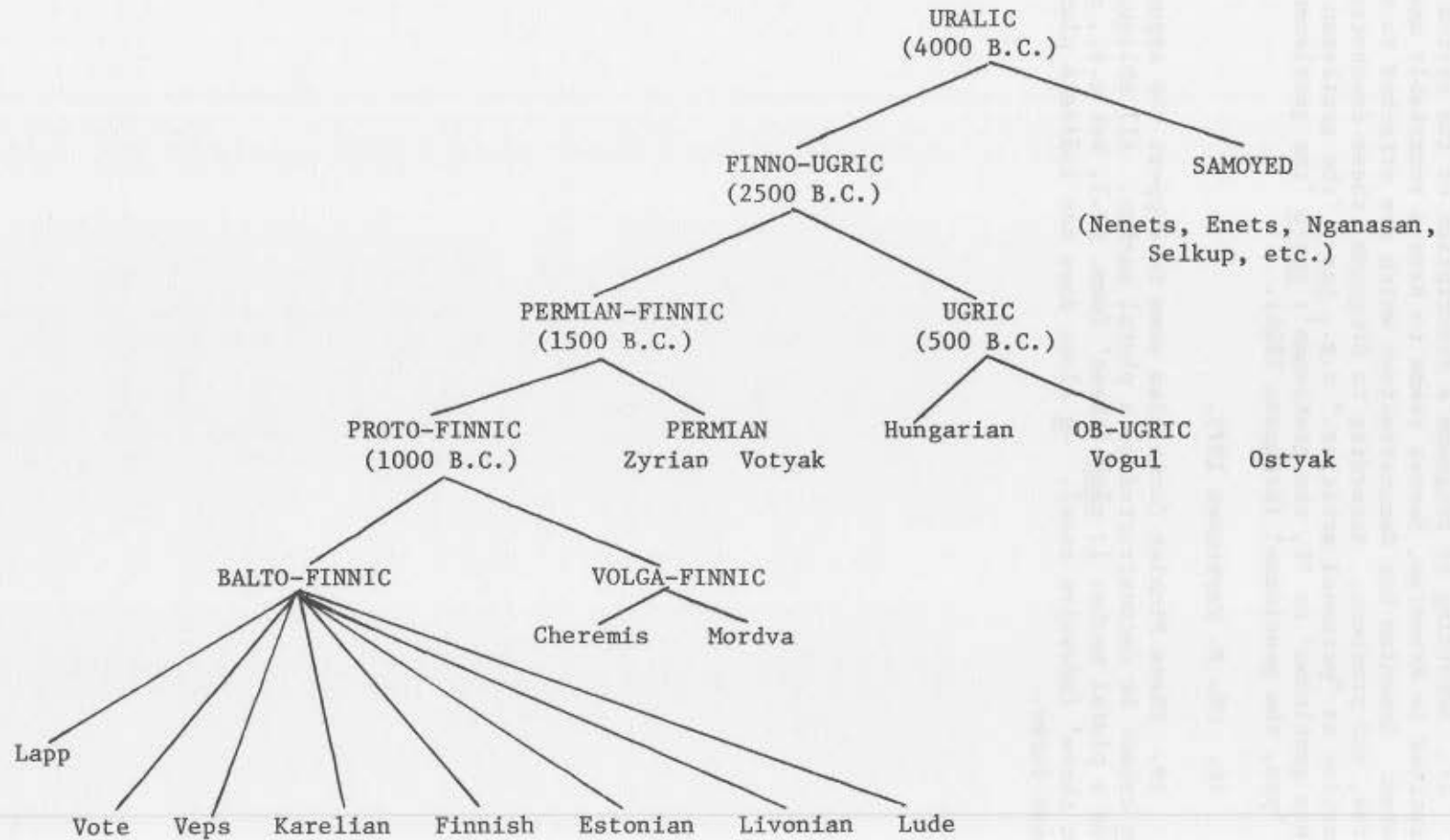
17. According to Brugmann's description of the system of demonstratives in Armenian, Mordva seems to have a remarkably analogous system. Armenian has demonstratives which are attached to nouns, verbs, and pronouns. According to Brugmann, these demonstratives function as "personal articles," e.g., ter-s 'the gentleman here' or 'this gentleman' or 'I, the gentleman'; ter-d 'the gentleman there' or 'you, the gentleman' (Brugmann 1904).

18. Cf. F. Karttunen 1975.

19. These Finnish forms also seem to support the argument that *-n cannot be reconstructed as a plural marker. All oblique case-forms have a plural marker i: nämä 'these' (nom. pl.), but e.g., nä-i-llä 'on these' (adessive case). -n alone does not indicate plurality in these forms.

APPENDIX I

Finno-Ugric Family Tree



APPENDIX II

TABLE 1. PERSON MARKERS: 1st PERSON

Language		Singular			Plural		
		px	Vb suffix	Pers. pron.	px	Vb. suffix	Pers. pron.
Balto-Finnic	FINNISH	ni	n	mi-nä	mme	mme	me
	ESTONIAN	(ni)	n	mi-na~ma	-	me	meie~me
Volga Finnic	MORDVA	m	n~n'	mon~mon'	mok/nok	nek/nok/nuk	m'in'
	CHEREMIS	m	m	mən'e mə(j) min' etc.	na~nä	na~nä	me/mä
Permian	ZYRIAN	m	m~Ø	me	nym	mö	mi~mije
	VOTYAK	m~Ø	m~Ø	mon/min	my	mɛ~my	mi
HUNGARIAN		m	m	én	nk	unk/juk etc.	mi
Ob-Ugric	VOGUL	m	m	ɛm, am, ɔm, etc.	w	we	man~män etc.
	OSTYAK	m	em/əm	ma(n)	(e)w	eu/ou əw	mon~men

TABLE 2. PERSON MARKERS: 2nd PERSON

Language		Singular			Plural		
		px	Vb suffix	Pers. pron.	px	Vb suffix	Pers. pron.
Balto-Finnic	FINNISH	si	t	si-nä	nne	tte	te
	ESTONIAN	(si)	d	sina~sa	-	te	teie~te
Volga Finnic	MORDVA	t	t~t'	ton~ton'	nk, ŋk	de~do	tin'
	CHEREMIS	t~d	t	tən/təje	da~dä ta~tä	ta~tä da~dä	ta/te
Permian	ZYRIAN	t~d	n	te	nyd	nyd	ti/tije
	VOTYAK	d	d	tin~ton	dy	d(y)	ti
	HUNGARIAN	d	d	te	tek~tok	(ja)tok~tek	ti
Ob-Ugric	VOGUL	n	n	nag nei, etc.	(ə)n	ne	nan~nän, etc.
	OSTYAK	(e)n	(e)n/(ə)n	nan/noŋ etc.	(ə)n	(ə)n/ten /ələn	nin/nan, etc.

TABLE 3. PERSON MARKERS: 3rd PERSON

Language		Singular			Plural		
		px	Vb. suffix	Pers. pron.	px	Vb. suffix	Pers. pron.
Balto-Finnic	FINNISH	nsa~nsä	v [+long]	hän/se	nsa~nsä	vat~vät	he/ne
	ESTONIAN	(sa)	b	tema~ta	-	vad	nemad~nad
Volga Finnic	MORDVA	zo	i/ś	son~son'	st, sk	t'/s't'	sin'~śin'
	CHEREMIS	žo~žə etc.	žo etc.	tudo/tuđo	što~štə	t/št	tudəβlak
Permian	ZYRIAN	s	∅ (s)	se, si (je)	nys	ny(s)	na(je)
	VOTYAK	s~z	∅/z	so	zy	∅/z	sojos
	HUNGARIAN	(j)e etc.	(j)a	ő	(j)ük etc.	ják	ők
Ob-Ugric	VOGUL	t/∅	∅	tau etc.	n/l	t	tan~tän
	OSTYAK	(ə)t/l	te/li/∅	tuv luw joy lou teu	(e)t	əl et et	ti(γ) li luw etc.

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